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$$10^{\log x} = x$$

$$10^{\log y} = y$$

$$xy = 10^{\log x} \cdot 10^{\log y}$$

$$xy = 10^{(\log x + \log y)} = 10^{\log xy}$$

$$\log xy = \log x + \log y.$$

---

$$\frac{y}{x} = \frac{10^{\log y}}{10^{\log x}} =$$

$$\frac{y}{x} = 10^{(\log y - \log x)} = 10^{\log \frac{y}{x}}$$

$$\log \frac{y}{x} = \log y - \log x$$

---

$$x^n = (10^{\log x})^n$$

$$x^n = 10^{n \log x} = \log(x^n)$$

$$\log x^n = n \log x$$

---

$$\sqrt[n]{x} = 10^{\frac{\log x}{n}}$$

$$\sqrt[n]{x} = 10^{\frac{\log x}{n}} = 10^{\log \sqrt[n]{x}}$$

$$\log(\sqrt[n]{x}) = \frac{1}{n} \log x$$

# LOGARITHMIC AND TRIGONOMETRIC TABLES

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## EXPLANATION OF THE TABLES.



### PRELIMINARY NOTIONS.

1. The numerical calculations which occur in Trigonometry are very much abbreviated by the aid of logarithms. The rules for their use are as follows :

*The logarithm of a product is equal to the sum of the logarithms of its factors.*

*The logarithm of a quotient is equal to the logarithm of the dividend minus the logarithm of the divisor.*

*The logarithm of any power of a number is equal to the logarithm of the number multiplied by the exponent of the power.*

*The logarithm of any root of a number is equal to the logarithm of the number divided by the index of the root.*

For the investigations of these rules the student is referred to the "Treatise on Trigonometry," p. 87, or to works on Algebra.

*The Common Logarithms* (Briggs's) are the only ones used in extensive numerical calculations, and the only ones given in the following tables.

*The common logarithm of a number is the exponent of that power of 10 which is equal to the number.*

Thus, the logarithm of 100 is 2, because  $10^2 = 100$ . This is usually written  $\log 100 = 2$ . 10 is the *base* of the common system.

2. *A system of common logarithms* means the logarithms of all positive numbers to the base 10.

From the above definition of common logarithms, it follows that

$10^0 = 1$ ,  $\therefore \log 1 = 0$ ;  $10^{-1} = .1$ ,  $\therefore \log 0.1 = -1$ ,  
 $10^1 = 10$ ,  $\therefore \log 10 = 1$ ;  $10^{-2} = .01$ ,  $\therefore \log 0.01 = -2$ ,  
 $10^2 = 100$ ,  $\therefore \log 100 = 2$ ;  $10^{-3} = .001$ ,  $\therefore \log 0.001 = -3$ ,  
 $10^3 = 1000$ ,  $\therefore \log 1000 = 3$ ; etc.  $\log 0.0001 = -4$ , etc.

Hence, the logarithm of any number between 1 and 10 is some number between 0 and 1; i.e.,  $0 + \text{a fraction}$ ; between 10 and 100 is some number between 1 and 2; i.e.,  $1 + \text{a fraction}$ , etc., etc.

Thus, it appears that the logarithm of any number greater than 1 is *positive*, and the logarithm of any positive number less than 1 is *negative*; and in general the logarithm of a number consists of two parts, an integral part and a decimal part.

The integral part is called the *characteristic* of the logarithm, and may be *either positive or negative*.

The decimal part is called the *mantissa* of the logarithm, and is *always kept positive*, in order that the *mantissæ of the logarithms of all numbers expressed by the same digits in the same order may always be the same*.

3. It is evident from the above table that the characteristic can always be obtained by the following rule:

*The characteristic of the logarithm of a number greater than unity is positive, and one less than the number of digits preceding the decimal point.*

*The characteristic of the logarithm of a number less than unity is negative, and one more than the number of ciphers immediately after the decimal point.*

Thus, the characteristics of the logarithms of 3406, 340.6, 34.06, 3.406, .3406, .0003406, are respectively, 3, 2, 1, 0,  $-1$ ,  $-4$ ; the mantissæ are the same, being .53224.

Hence,  $\log .0003406 = 4.53224$ , the minus sign being written over the characteristic to indicate that it only is negative, the mantissa being always positive.

4. In practice it is more common to avoid the use of negative characteristics by increasing them by 10, and then by allowing for it in the interpretation of the results.

NOTE. — It is only in rare cases that more than seven places of the mantissa are required; in general, four or five are sufficient; and it is only for the most accurate computations that six or seven are used.

5. A *table of logarithms* is a table by which the logarithm of any given number, or the number corresponding to any given logarithm, may be found.



TABLE I. LOGARITHMS OF NUMBERS (Pages 1-19).

6. This table gives the mantissæ of the logarithms of the natural numbers from 1 to 10009, calculated to five decimal places.\* The characteristics are determined by the rule in Art. 3. On p. 1, both the characteristic and the mantissa are given.

7. *To find the logarithm of a given number.*

(1) *For a number of one, two, or three figures only.*

If the number has one or two figures, find it on page 1 in the column headed N. Then in the same horizontal line as the number, and in the next column headed Log, will be found its logarithm.

Thus,  $\log 7 = 0.84510$ ;  $\log 68 = 1.83251$ .

If the number has three figures, find on one of the pages 2-19, in the column headed N, the given number. Then in the same horizontal line as the number, and in the next vertical column, which is headed 0, will be found the mantissa of its logarithm: prefix the characteristic by the rule in Art. 3.

Thus,  $\log 415 = 2.61805$ ;  $\log 94.8 = 1.97681$ .

NOTE 1. — A dash under a terminal 5 indicates that the true value is less than 5. Thus the logarithm of 415 to seven decimal places is 2.6180481. If only five decimal places are required, we neglect the 81 and increase 4 to 5. If six decimal places are required, the 1 is neglected; thus the above logarithm is written 2.618048.

(2) *For a number of four figures.*

Find on one of the pages 2-19, in the column headed N, the first three figures of the given number. Then in the same horizontal line as the first three figures, and in the vertical column which has the fourth figure of the given number at the top, will be found the last three figures of the mantissa of the required logarithm, to which the first two figures in the nearest mantissa above, in the column headed 0, are to be prefixed; supply the characteristic by the rule in Art. 3.

NOTE 2. — To save space, only the last three figures of the mantissæ are given in the columns headed 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, and the first two at intervals, in the column under L. When the first two figures are not

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\* With five decimal places the numbers will be correct to the one hundred-thousandth part of a unit, which is near enough for most practical applications.

given in any line, they are to be taken from the first line above containing them, unless the last three are preceded by a star \*, in which case they are to be taken from the line immediately below.

Thus, (p. 13)  $\log 6615 = 3.82053$ ,  $\log 67.36 = 1.82840$ ,  $\log 6.764 = 0.83020$ .

(3) *For a number of more than four figures.*

To find  $\log 2845.672$ .

We find from the table on p. 5, as in (2),

$$\begin{array}{r} \log 2845 = 3.45408 \\ \text{and} \quad \log 2846 = 3.45423 \\ \hline \text{diff. for } 1 = 0.00015 \end{array}$$

Thus, for an increase of 1 in the number there is an increase of .00015 in the logarithm.

Hence, *assuming* that the increase of the logarithm is proportional to the increase of the number, then *an increase in the number of .672 will correspond to an increase in the logarithm of*  $.672 \times .00015 = .00010$ , *to the nearest fifth decimal place.*

$$\begin{array}{r} \text{Hence} \quad \log 2845 \quad = 3.45408 \\ \text{diff. for } .672 = .00010 \\ \hline \therefore \log 2845.672 = 3.45418 \end{array}$$

NOTE 3. — We assumed in this method that the increase in a logarithm is *proportional* to the increase in the number. Although this is not *strictly* true, yet in most cases it is sufficiently exact for practical purposes.

8. From the above work we have the following rule for a number of more than four figures :

*Find the tabular mantissa of the first four significant figures of the number; subtract this mantissa from the next greater tabular mantissa; multiply the difference thus found by the remaining figures of the number, as a decimal; add the product to the mantissa of the first four figures, and prefix the proper characteristic.*

NOTE 4. — The difference between any mantissa in the table and the mantissa of the next higher number of four figures, is called the *tabular difference*; and the corresponding *proportional parts* are placed in the column headed P.P. By means of this column of proportional parts the above multiplication is facilitated.

It will be seen that this difference between the logarithms of two consecutive numbers is not always the same; for instance, those in the upper part of p. 5 differ by .00018, while those in the

middle and the lower parts differ by .00016 and .00014. In the column with the heading 15 we see the difference 9 corresponding to the figure 6, which implies that when the difference between the logarithms of two consecutive numbers is .00015, the increase in the *logarithm* corresponding to an increase of .6 in the *number* is .00009.

Thus, the mantissæ of the logarithms of 2845 and 2846 differ by .00015; therefore 15 is the *tabular difference*. Then in the proportional table for 15, we find

the proportional part for	6 =	9.00
$\frac{1}{10}$ "        "        "	7 =	1.05
$\frac{1}{100}$ "        "        "	2 =	0.03
∴        "        "        "	672 =	10.08,

or 10 to the nearest integer, which agrees with the value above.

#### 9. To find the number corresponding to a given logarithm.

By reversing the above operations, the number corresponding to a given logarithm may be found, as will be seen by the following example :

Find the number whose logarithm is 3.47384.

We find that this mantissa does not occur exactly in the table. We therefore take out the next smaller mantissa, .47378 (on p. 5), whose corresponding number is 2977, and the next greater mantissa .47392, whose corresponding number is 2978.

The difference between these two mantissæ = .00014.

The difference between the smaller and given mantissæ = .00006.

Thus, for an increase of 1 in the number, there is an increase of .00014 in the mantissa; hence for an increase of .00006 in the mantissa there will be an increase of  $\frac{6}{14}$  of 1 in the number = .43.

Hence, the number corresponding = 2977.43.

From the above work we have the following rule:

*Find the tabular mantissa next less than the given mantissa, and the corresponding number of four figures; divide the difference of these mantissæ by the tabular difference, annex the quotient to the first four figures of the number, and point off the result according to the characteristic.*

NOTE. — The labor of division may be saved by using the table of proportional parts for 14, as follows :

Given mantissa	= .47384
mantissa of 2977	= <u>.47378</u>
diff. of mantissæ	= 6
proportional part for 4	= <u>5.6</u>
	0.4
proportional part for .3	= <u>.42</u>
	- 0.02

∴ number = 2977.43 . . .

10. *Arithmetic Complement.* By the *arithmetic complement* of the logarithm of a number, or briefly, the *cologarithm* of the number, is meant the remainder found by subtracting the logarithm from 10. To subtract one logarithm,  $b$ , from another,  $a$ , is the same as to add the cologarithm,  $10 - b$ , and then subtract 10 from the result.

$$\text{Thus,} \quad a - b = a + (10 - b) - 10.$$

When one logarithm is to be subtracted from the sum of several others, it is more convenient to *add its cologarithm* to the sum, and reject 10. The advantage of using the cologarithm is that it enables us to exhibit the work in a more compact form.

The cologarithm is easily taken from the table mentally by subtracting the last significant figure on the right from 10, and all the others from 9.

## X TABLE II. LOGARITHMS OF SINES, TANGENTS, ETC.

11. This table (pages 21–82) contains the logarithms of the sines, tangents, cotangents, and cosines of all angles from  $0^\circ$  to  $90^\circ$ .

If the angle is less than  $45^\circ$ , we look for the name of the function and the number of degrees in the angle at the *top* of the page, and the minutes in the *left-hand* column.

If the angle is between  $45^\circ$  and  $90^\circ$ , we look for the name of the function and the number of degrees at the *bottom* of the page, and the minutes in the *right-hand* column. In each case the horizontal rows at the top of the pages go with the degrees at the top, and the horizontal rows at the bottom go with the degrees at the bottom.

On pp. 21–33 the minutes and each ten seconds are given in columns at the left and right, and the odd seconds are given in a horizontal row at the top and bottom of each page. On

pp. 34–82 the minutes are given in columns at the left and right and on pp. 34–43 each ten seconds is given in a horizontal row at the top and bottom of each page.

It is sufficient to have tables which give the functions of angles only in the first quadrant, since the functions of all angles of whatever size can be reduced to functions of angles less than  $90^\circ$  (Art. 35).

12. Since the sines and cosines of all angles, the tangents of angles less than  $45^\circ$ , and the cotangents of angles greater than  $45^\circ$ , are *less than unity*, the logarithms of these functions are *negative*. To avoid the inconvenience of using negative characteristics, 10 is added to the logarithms of all these functions before they are entered in the table. The logarithms so increased are called the *tabular logarithms* of the sine, tangent, etc.

Thus,

$$\begin{aligned}\log \sin 27^\circ 48' &= 9.66875; \\ \log \tan 27^\circ 48' &= 9.72201; \\ \log \cot 70^\circ 5' &= 9.55910; \\ \log \cos 27^\circ 48' &= 9.94674.\end{aligned}$$

13. *To find the logarithmic sine, tangent, etc., of a given angle.*

(1) *When the angle contains only degrees and minutes.*

In this case the logarithm is given immediately in the table. Thus we find (pp. 56 and 57), the following:

$$\begin{aligned}\log \sin 18^\circ 38' &= 9.50449. & \log \sin 71^\circ 13' &= 9.97623. \\ \log \cot 19^\circ 23' &= 0.45367. & \log \tan 70^\circ 51' &= 0.45935.\end{aligned}$$

(2) *When the angle contains degrees, minutes, and seconds.*

In this case we take out the logarithmic function for the degrees and minutes, as in (1); the correction for the seconds has to be calculated in the same manner as for the logarithms of numbers (Art. 7). For this purpose, on pp. 44–82, the differences of the logarithmic sines and cosines for  $1'$  are given in the columns headed *d.* (*difference*), and those of the logarithmic tangents and cotangents in the columns headed *c. d.* (*common difference*). In the case of tangent and cotangent, only one column of differences is necessary for both functions.

Ex. 1. To find  $\log \sin 18^\circ 25' 35''$ .

Page 56,  $\log \sin 18^\circ 25' = 9.49958$ . Tabular difference = 38.  
Hence,  $\text{diff. for } 35'' = \frac{38}{60} \times 35 = \frac{22}{3}$   
 $\therefore \log \sin 18^\circ 25' 35'' = 9.49980$ .

From this work, we have the following rule:

*Find from the table the logarithmic function for the degrees and minutes, and the corresponding tabular difference; divide this difference by 60, multiply the quotient by the number of seconds, and add this correction, if the function is a sine or tangent; or subtract it, if the function is a cosine or cotangent.*

NOTE. — The labor of multiplication and division may be saved by means of the tables of proportional parts given in the right margin, the use of which is similar to those given in the table of logarithms of numbers. The proportional parts between  $0^\circ$  and  $1^\circ$ , and  $89^\circ$  and  $90^\circ$ , are given for 1, 2, 3, etc., tenths of a second; and between  $1^\circ$  and  $89^\circ$  they are given for 1, 2, 3, etc., seconds.

Ex. 2. To find  $\log \tan 64^\circ 35' 18''$ .

Page 63,  $\log \tan 64^\circ 35' = 0.32313$ . Tab. diff. = 33.

Under diff. 33, P.P. for  $10'' = 5.5$

P.P. for  $8'' = 4.4$

$\therefore \log \tan 64^\circ 35' 18'' = 0.32323$ .

Ex. 3. To find  $\log \cos 35^\circ 44' 49''$ .

Page 73,  $\log \cos 35^\circ 44' = 9.90942$ . Tab. diff. = 9.

Under diff. 9, P.P. for  $40'' = -6.0$

P.P. for  $9'' = -1.4$

$\therefore \log \cos 35^\circ 44' 49'' = 9.90935$ .

NOTE. — Since the cosine diminishes as the angle increases, we *subtract* the proportional parts.

14. *To find the angle corresponding to a given logarithmic sine or tangent.*

By reversing the above operations, the angle corresponding to a given logarithmic function may be found, as will be seen by the following examples:

Ex. 1. Find the angle whose  $\log \sin = 9.81510$ .

We find that this mantissa does not occur exactly in the column of logarithmic sines. We therefore take out the next smaller logarithmic sine, 9.81505 (on p. 78), whose corresponding angle is  $40^\circ 47'$ , and the tabular difference 14. The difference between this logarithm and the given one is 5. The difference for  $1''$  is  $14 \div 60$  or .23; hence for an increase of 5 in the mantissa there will be an increase of  $\frac{5}{.23}$  seconds in the angle =  $21''$ .

Hence, the angle corresponding =  $40^\circ 47' 21''$ .

From this work we have the following rule:

*Find the tabular logarithmic function next less than the given function, and the corresponding degrees and minutes; divide the difference of these logarithms by the difference for 1", and annex the quotient to the degrees and minutes.*

NOTE 1. — The method for finding the angle corresponding to a given logarithmic *cosine* or *cotangent* is the same, except that we find the next greater tabular logarithmic function, instead of the next less.

NOTE 2. — The labor of division may be saved by using the tables of proportional parts.

Ex. 2. Find the angle whose  $\log \tan = 9.87258$ .

Given  $\log \text{tangent} = 9.87258$

Page 74,  $\log \tan 36^\circ 42' = 9.87238$ . Tab. diff. = 26.

Difference of logarithms = 20

Under tab. diff. 26, P.P. for  $40'' = 17.3$

2.7

Under tab. diff. 26, P.P. for  $6'' = 2.6$

.1

$\therefore$  required angle =  $36^\circ 42' 46''$ .

Ex. 3. Find the angle whose  $\log \cos = 9.27235$ .

Given  $\log \text{cosine} = 9.27235$

Page 48,  $\log \cos 79^\circ 12' = 9.27273$ . Tab. diff. = 67.

Difference of logarithms = 38

Under tab. diff. 67, P.P. for  $30'' = 33.5$

4.5

Under tab. diff. 67, P.P. for  $4'' = 4.5$

$\therefore$  required angle =  $79^\circ 12' 34''$ .

# 15. SINES, ETC., OF SMALL ANGLES.

Ex. 1. To find  $\log \sin 0^\circ 45' 37''.28$ .

Page 30,  $\log \sin 0^\circ 45' 37'' = 8.12284$ . Tab. diff. = 16.

Hence, diff. for  $0''.28 = 16 \times .28 = 4.48$

$\therefore \log \sin 0^\circ 45' 37''.28 = 8.12288$

NOTE. — The tables of proportional parts may be used, as explained in Art. 13.

Ex. 2. To find  $\log \tan 0^\circ 54' 27''.68$ .

Page 33,  $\log \tan 0^\circ 54' 27'' = 8.19976$ . Tab. diff. = 13.

Under diff. 13, P.P. for  $0''.6 = 7.8$

P.P. for  $.08 = 1.04$

$\therefore \log \tan 0^\circ 54' 27''.68 = 8.19985$ .

Ex. 3. To find  $\log \cos 89^\circ 22' 35''.63$ .

Page 28,  $\log \cos 89^\circ 22' 35'' = 8.03678$ . Tab. diff. = 19.

P.P. for  $0''.6 = -11.4$

P.P. for  $.03 = -0.57$

$\therefore \log \cos 89^\circ 22' 35''.63 = 8.03666$ .

Ex. 4. To find  $\log \sin 4^\circ 36' 58''.6$ .

Page 40,  $\log \sin 4^\circ 36' 50'' = 8.90548$ . Tab. diff. = 26.

P.P. for  $8'' = 20.8$

P.P. for  $0.6 = 1.56$

$\therefore \log \sin 4^\circ 36' 58''.6 = 8.90570$ .

Ex. 5. To find  $\log \tan 5^\circ 14' 46''.4$ .

Page 43,  $\log \tan 5^\circ 14' 40'' = 8.96279$ . Tab. diff. = 23.

P.P. for  $6'' = 13.8$

P.P. for  $0.4 = 0.92$

$\therefore \log \tan 5^\circ 14' 46''.4 = 8.96294$ .

Page 42,  $\log \cos 5^\circ 38' 32''.8 = 9.99789$ .

Ex. 6. To find  $\log \cot 85^\circ 45' 23''.7$ .

Page 41,  $\log \cot 85^\circ 45' 20'' = 8.87049$ . Tab. diff. = 29.

P.P. for  $3'' = -8.7$

P.P. for  $0.7 = -2.03$

$\therefore \log \cot 85^\circ 45' 23''.7 = 8.87038$ .

NOTE. — When the logarithmic function is given, the angle may be found by reversing the above operations, as in Art. 14.

### TABLE III. THE NATURAL\* TRIGONOMETRIC FUNCTIONS.

16. This table (pp. 84–87) contains the natural sines, tangents, etc., of angles from  $0^\circ$  to  $90^\circ$ , at intervals of  $10'$ , calculated to four places of decimals. If greater accuracy is required it may be obtained by the proportional parts.

\* A table which gives the values of the trigonometric sines, cosines, etc., is called a *table of natural trigonometric functions*.



## 17. To find the sine, tangent, etc., of a given angle.

If the *sine* or *tangent* is required, we look for the degrees in the *left-hand* column, and the minutes at the *top* of the page. If the *cosine* or *cotangent* is required, we look for the degrees in the *right-hand* column, and the minutes at the *bottom* of the page. The use is similar to that of the table of logarithmic functions, as may be seen by the following examples :

Ex. 1. Find the sine of  $28^{\circ} 14'$ .

$$\begin{array}{rcl} \text{Page 84,} & \sin 28^{\circ} 10' = 0.4720. & \text{Tab. diff.} = 26. \\ \text{Under diff. 26, P.P. for } 4' = & \underline{10.4} & \\ \therefore \sin 28^{\circ} 14' = & 0.4730. & \end{array}$$

Ex. 2. Find the cotangent of  $81^{\circ} 49'$ .

$$\begin{array}{rcl} \text{Page 86,} & \cot 81^{\circ} 40' = 0.1465. & \text{Tab. diff.} = 30. \\ \text{Under diff. 30, P.P. for } 9' = & \underline{-27} & \\ \therefore \cot 81^{\circ} 49' = & 0.1438. & \end{array}$$

## 18. To find the angle corresponding to a given sine, tangent, cosine, or cotangent.

Ex. 1. Find the angle whose cosine is .4585.

$$\begin{array}{rcl} & \text{Given cosine} = 0.4585 & \\ \text{Page 84,} & \cos 62^{\circ} 40' = 0.4592. & \text{Tab. diff.} = 26. \\ & \text{diff.} = \underline{7} & \\ \text{Under tab. diff. 26, P.P. for } 2' = & \underline{5.2} & \\ & \underline{1.8} & \\ \text{" " " " } 7' = & \underline{1.8} & \\ \therefore \text{required angle} = 62^{\circ} 42'.7. & & \end{array}$$

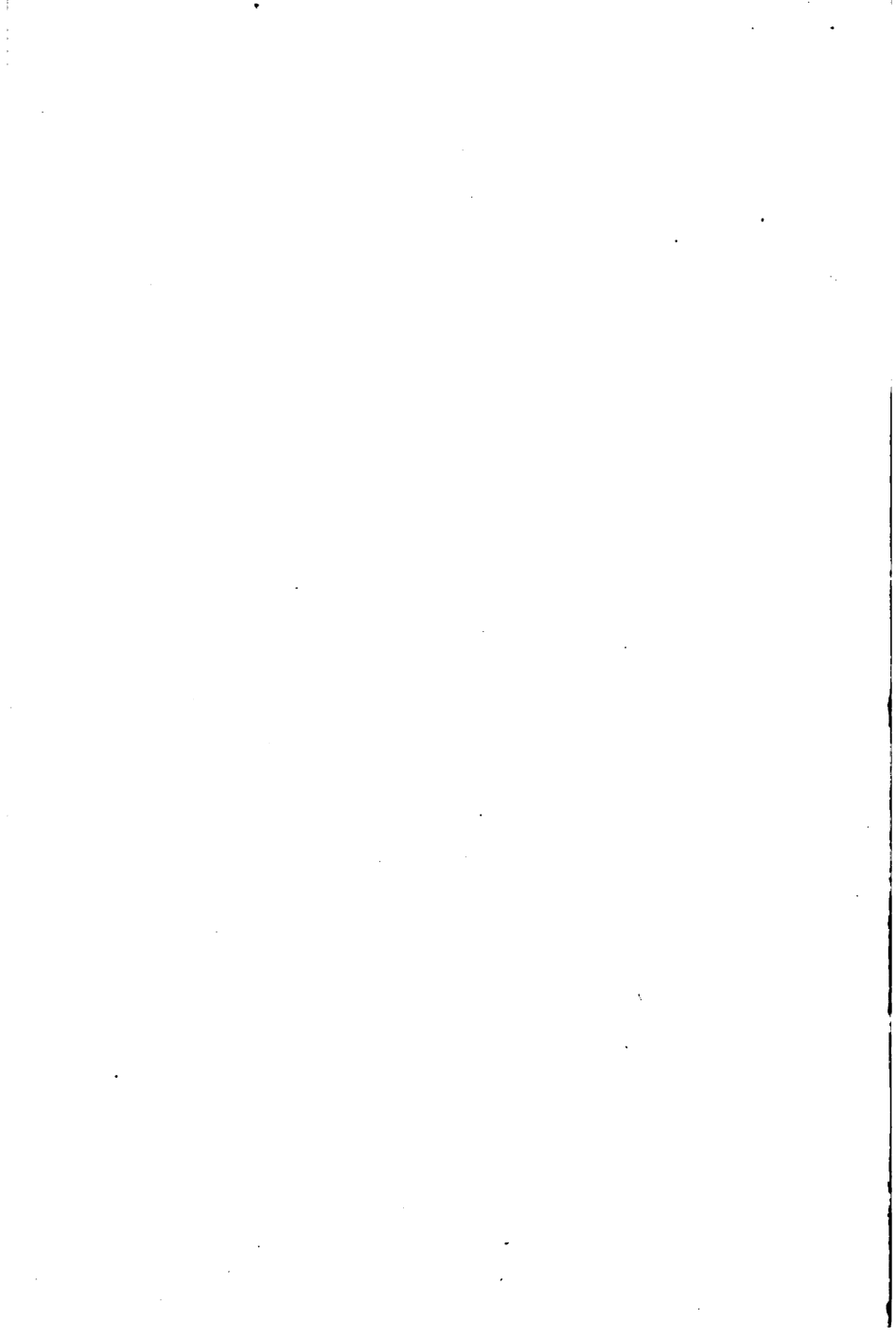


TABLE I.

2028  
10,000

COMMON LOGARITHMS OF NUMBERS.

From 1 to 10009.

N.	Log.	N.	Log.	N.	Log.	N.	Log.	N.	Log.
0	— ∞	20	1.80 108	40	1.60 206	60	1.77 815	80	1.90 309
1	0.00 000	21	1.82 222	41	1.61 278	61	1.78 588	81	1.90 849
2	0.30 108	22	1.84 249	42	1.62 325	62	1.79 289	82	1.91 381
3	0.47 712	23	1.86 178	43	1.63 347	63	1.79 984	83	1.91 908
4	0.60 206	24	1.88 021	44	1.64 345	64	1.80 618	84	1.92 428
5	0.69 897	25	1.89 794	45	1.65 321	65	1.81 291	85	1.92 943
6	0.77 815	26	1.41 497	46	1.66 276	66	1.81 954	86	1.93 450
7	0.84 510	27	1.48 186	47	1.67 210	67	1.82 607	87	1.93 952
8	0.90 809	28	1.44 716	48	1.68 124	68	1.83 251	88	1.94 448
9	0.95 424	29	1.46 240	49	1.69 020	69	1.83 885	89	1.94 930
10	1.00 000	30	1.47 712	50	1.69 897	70	1.84 510	90	1.95 424
11	1.04 189	31	1.49 186	51	1.70 757	71	1.85 126	91	1.95 904
12	1.07 918	32	1.50 515	52	1.71 600	72	1.85 788	92	1.96 379
13	1.11 394	33	1.51 861	53	1.72 428	73	1.86 389	93	1.96 848
14	1.14 618	34	1.53 148	54	1.73 239	74	1.86 928	94	1.97 318
15	1.17 609	35	1.54 407	55	1.74 036	75	1.87 506	95	1.97 772
16	1.20 412	36	1.55 680	56	1.74 819	76	1.88 081	96	1.98 227
17	1.23 045	37	1.56 820	57	1.75 587	77	1.88 649	97	1.98 677
18	1.25 527	38	1.57 978	58	1.76 348	78	1.89 209	98	1.99 122
19	1.27 875	39	1.59 106	59	1.77 085	79	1.89 768	99	1.99 564
20	1.30 108	40	1.60 206	60	1.77 815	80	1.90 309	100	2.00 000

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100	00	000	043	087	130	178	217	260	308	346	389	
101		432	475	518	561	604	647	689	732	775	817	44 48 42
102		860	908	945	988	080	*072	*115	*157	*199	*242	1 4,4 4,8 4,2
103	01	284	326	368	410	452	494	536	578	620	662	2 5,8 5,6 8,4
104		708	745	787	828	870	912	958	995	*036	*078	3 13,2 12,9 12,6
105	02	119	160	202	243	284	325	366	407	449	490	4 17,6 17,2 16,8
106		581	572	612	653	694	735	776	816	857	898	5 22,0 21,5 21,0
107		988	979	*019	*060	*100	*141	*181	*222	*262	*302	6 26,4 25,8 25,2
108	03	842	838	423	483	508	548	583	623	663	703	7 30,8 30,1 29,4
109		748	782	822	862	902	941	981	*021	*060	*100	8 35,2 34,4 33,6
110	04	189	179	218	258	297	336	376	415	454	498	9 39,6 38,7 37,8
111		582	571	610	650	689	727	766	805	844	883	41 40 39
112		922	961	999	*038	*077	*115	*154	*192	*231	*269	1 4,1 4,0 3,9
113	05	808	846	885	423	461	500	538	576	614	652	2 5,3 5,0 7,8
114		690	729	767	805	848	881	918	956	994	*032	3 12,3 12,0 11,7
115	06	070	108	145	183	221	258	296	333	371	408	4 16,4 16,0 15,6
116		446	488	521	558	595	638	670	707	744	781	5 20,5 20,0 19,5
117		819	856	898	930	967	*004	*041	*078	*115	*151	6 24,8 24,0 23,4
118	07	188	225	262	298	335	372	408	445	482	518	7 28,7 28,0 27,8
119		555	591	628	664	700	737	773	809	846	882	8 32,3 32,0 31,2
120		918	954	990	*027	*063	*099	*135	*171	*207	*243	9 36,9 36,0 35,1
121	08	279	314	350	386	422	458	498	529	565	600	38 37 36
122		636	672	707	743	778	814	849	884	920	955	1 3,8 3,7 3,6
123		991	*026	*061	*096	*132	*167	*202	*237	*272	*307	2 7,6 7,4 7,2
124	09	842	877	412	447	482	517	552	587	621	656	3 11,4 11,1 10,8
125		691	726	760	795	830	864	899	934	968	*003	4 15,2 14,8 14,4
126	10	087	072	106	140	175	209	243	278	312	346	5 19,0 18,5 18,0
127		880	415	449	488	517	551	585	619	653	687	6 22,8 22,2 21,6
128		721	755	789	823	857	890	924	958	992	*025	7 26,6 25,9 25,2
129	11	059	098	126	160	198	227	261	294	327	361	8 30,4 29,6 28,8
130		894	428	461	494	528	561	594	628	661	694	9 34,2 33,3 32,4
131		727	760	798	826	860	898	926	959	992	*024	35 34 33
132	12	057	090	128	156	189	222	254	287	320	352	1 3,5 3,4 3,3
133		885	418	450	488	516	548	581	618	646	678	2 7,0 6,8 6,6
134		710	748	775	808	840	872	905	937	969	*001	3 10,5 10,2 9,9
135	13	088	066	098	130	162	194	226	258	290	322	4 14,0 13,6 13,2
136		854	886	418	450	481	518	545	577	609	640	5 17,5 17,0 16,5
137		672	704	785	767	799	830	862	898	925	956	6 21,0 20,4 19,8
138		988	*019	*051	*082	*114	*145	*176	*208	*239	*270	7 24,5 23,8 23,1
139	14	801	838	864	895	426	457	489	520	551	582	8 28,0 27,2 26,4
140		618	644	675	706	737	768	799	829	860	891	9 31,5 30,6 29,7
141		922	958	988	*014	*045	*076	*106	*137	*168	*198	32 31 30
142	15	229	259	290	320	351	381	412	442	473	508	1 3,2 3,1 3,0
143		584	564	594	625	655	685	715	746	776	806	2 6,4 6,2 6,0
144		886	866	897	927	957	987	*017	*047	*077	*107	3 9,6 9,3 9,0
145	16	187	167	197	227	256	286	316	346	376	406	4 12,8 12,4 12,0
146		485	465	495	524	554	584	618	648	678	702	5 16,0 15,5 15,0
147		782	761	791	820	850	879	909	938	967	997	6 19,2 18,6 18,0
148	17	026	056	085	114	145	178	202	231	260	289	7 22,4 21,7 21,0
149		819	848	877	406	435	464	498	522	551	580	8 25,6 24,8 24,0
150		609	638	667	696	725	754	782	811	840	869	9 28,8 27,9 27,0
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150	17	609	638	667	696	725	754	782	811	840	869	
151		898	926	955	984	013	041	070	099	127	156	29 28
152	18	184	213	241	270	298	327	355	384	412	441	1 2,9 2,8
153		469	498	526	554	583	611	639	667	696	724	2 5,8 5,6
154		752	780	808	837	865	893	921	949	977	005	3 8,7 8,4
155	19	033	061	089	117	145	173	201	229	257	285	4 11,6 11,2
156		812	840	868	896	924	451	479	507	535	562	5 14,5 14,0
157		590	618	645	673	700	728	756	783	811	838	6 17,4 16,8
158		866	893	921	948	976	003	030	058	085	112	7 20,3 19,6
159	20	140	167	194	222	249	276	302	330	358	385	8 23,2 22,4
160		412	439	466	493	520	548	575	602	629	656	9 26,1 25,2
161		683	710	737	763	790	817	844	871	898	925	27 26
162		952	978	005	032	059	085	112	139	165	192	1 2,7 2,6
163	21	219	245	272	299	325	352	378	405	431	458	2 5,4 5,2
164		484	511	537	564	590	617	643	669	696	722	3 8,1 7,8
165		743	775	801	827	854	880	906	932	958	985	4 10,8 10,4
166	22	011	037	063	089	115	141	167	194	220	246	5 13,5 13,0
167		272	298	324	350	376	401	427	453	479	505	6 16,2 15,6
168		531	557	583	608	634	660	686	712	737	763	7 18,9 18,2
169		789	814	840	866	891	917	943	968	994	019	8 21,6 20,8
170	23	045	070	096	121	147	172	198	223	249	274	9 24,3 23,4
171		800	825	850	876	901	426	452	477	502	528	25
172		553	578	603	629	654	679	704	729	754	779	1 2,5
173		805	830	855	880	905	930	955	980	005	030	2 5,0
174	24	055	080	105	130	155	180	204	229	254	279	3 7,5
175		304	329	353	378	403	428	452	477	502	527	4 10,0
176		551	576	601	625	650	674	699	724	748	773	5 12,5
177		797	822	846	871	895	920	944	969	993	018	6 15,0
178	25	042	066	091	115	139	164	188	212	237	261	7 17,5
179		285	310	334	358	382	406	431	455	479	503	8 20,0
180		527	551	575	600	624	648	672	696	720	744	9 22,5
181		768	792	816	840	864	888	912	935	959	983	24 23
182	26	007	031	055	079	102	126	150	174	198	221	1 2,4 2,3
183		245	269	293	316	340	364	387	411	435	458	2 4,8 4,6
184		482	505	529	553	576	600	623	647	670	694	3 7,2 6,9
185		717	741	764	788	811	834	858	881	905	928	4 9,6 9,2
186		951	975	998	021	045	068	091	114	138	161	5 12,0 11,5
187	27	184	207	231	254	277	300	323	346	370	393	6 14,4 13,8
188		416	439	462	485	508	531	554	577	600	623	7 16,8 16,1
189		646	669	692	715	738	761	784	807	830	852	8 19,2 18,4
190		875	898	921	944	967	989	012	035	058	081	9 21,6 20,7
191	28	103	126	149	171	194	217	240	262	285	307	22 21
192		380	353	375	398	421	443	466	488	511	533	1 2,2 2,1
193		556	578	601	623	646	668	691	713	735	758	2 4,4 4,2
194		780	803	825	847	870	892	914	937	959	981	3 6,6 6,3
195	29	003	026	048	070	092	115	137	159	181	203	4 8,8 8,4
196		226	248	270	292	314	336	358	380	403	425	5 11,0 10,5
197		447	469	491	513	535	557	579	601	623	645	6 13,2 12,6
198		667	688	710	732	754	776	798	820	842	863	7 15,4 14,7
199		885	907	929	951	973	994	016	038	060	081	8 17,6 16,8
200	30	103	125	146	168	190	211	233	255	276	298	9 19,8 18,9
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200	80	108	125	146	168	190	211	238	255	276	298	
201		290	341	388	384	406	428	449	471	492	514	22 21
202		585	557	578	600	621	648	664	685	707	728	1 2,2 2,1
203		750	771	792	814	835	856	878	899	920	942	2 4,4 4,2
204		968	984	1006	1027	1048	1069	1091	1112	1138	1154	3 6,6 6,3
205	81	175	197	218	239	260	281	302	323	345	366	4 8,8 8,4
206		887	408	429	450	471	492	513	534	555	576	5 11,0 10,5
207		597	618	639	660	681	702	723	744	765	785	6 13,2 12,6
208		806	827	848	869	890	911	931	952	973	994	7 15,4 14,7
209	83	015	085	056	077	098	118	139	160	181	201	8 17,6 16,8
210		222	243	268	284	305	325	346	366	387	408	9 19,8 18,9
211		428	449	469	490	510	531	552	572	593	618	20
212		684	654	675	695	715	736	756	777	797	818	1 2,0
213		888	858	879	899	919	940	960	980	1001	1021	2 4,0
214	83	041	062	082	102	122	143	163	183	203	224	3 6,0
215		244	264	284	304	325	345	365	385	405	425	4 8,0
216		445	465	486	506	526	546	566	586	606	626	5 10,0
217		646	666	686	706	726	746	766	786	806	826	6 12,0
218		846	866	885	905	925	945	965	985	1005	1025	7 14,0
219	84	044	064	084	104	124	143	163	183	203	223	8 16,0
220		242	262	282	301	321	341	361	380	400	420	9 18,0
221		489	459	479	498	518	537	557	577	596	616	19
222		685	655	674	694	713	732	752	772	792	811	1 1,9
223		880	850	869	889	908	928	947	967	986	1005	2 3,8
224	85	025	044	064	083	102	122	141	160	180	199	3 5,7
225		218	238	257	276	295	315	334	353	372	392	4 7,6
226		411	430	449	468	488	507	526	545	564	583	5 9,5
227		608	622	641	660	679	698	717	736	755	774	5 11,4
228		798	813	832	851	870	889	908	927	946	965	7 13,3
229		984	1008	1021	1040	1059	1078	1097	1116	1135	1154	8 15,2
230	86	178	192	211	229	248	267	286	305	324	342	9 17,1
231		361	380	399	418	436	455	474	493	511	530	18
232		549	568	586	605	624	642	661	680	698	717	1 1,8
233		736	754	773	791	810	829	847	866	884	903	2 3,6
234		922	940	959	977	996	1014	1033	1051	1070	1088	3 5,4
235	87	107	125	144	162	181	199	218	236	254	273	4 7,2
236		291	310	328	346	365	383	401	420	438	457	5 9,0
237		475	493	511	530	548	566	585	603	621	639	6 10,8
238		658	676	694	712	731	749	767	785	803	822	7 12,6
239		840	858	876	894	912	931	949	967	985	1003	8 14,4
240	88	021	039	057	075	093	112	130	148	166	184	9 16,2
241		202	220	238	256	274	292	310	328	346	364	17
242		382	399	417	435	453	471	489	507	525	543	1 1,7
243		561	578	596	614	632	650	668	686	703	721	2 3,4
244		739	757	775	792	810	828	846	863	881	899	3 5,1
245		917	934	952	970	987	1005	1023	1041	1058	1076	4 6,8
246	89	094	111	129	146	164	182	199	217	235	252	5 8,5
247		270	287	305	322	340	358	375	393	410	428	6 10,2
248		445	463	480	498	515	533	550	568	585	602	7 11,9
249		620	637	655	673	690	707	724	742	759	777	8 13,6
250		794	811	829	846	863	881	898	915	933	950	9 15,3
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250	89	794	811	829	846	863	881	898	915	933	950	
251		987	985	*002	*019	*087	*064	*071	*088	*106	*133	18
252	40	140	157	175	192	209	226	243	261	278	295	1 1,8
253		812	829	846	864	881	898	915	932	949	966	2 3,6
254		488	500	518	535	552	569	586	603	620	637	3 5,4
255		654	671	688	705	722	739	756	773	790	807	4 7,2
256		824	841	858	875	892	909	926	943	960	976	5 9,0
257		998	*010	*027	*044	*061	*078	*095	*111	*128	*145	6 10,8
258	41	162	179	196	212	229	246	263	280	296	313	7 12,6
259		380	347	363	380	397	414	430	447	464	481	8 14,4
260		497	514	531	547	564	581	597	614	631	647	9 16,2
261		664	681	697	714	731	747	764	780	797	814	17
262		880	847	863	880	896	913	929	946	963	979	1 1,7
263		996	*012	*029	*045	*062	*078	*095	*111	*127	*144	2 3,4
264	42	160	177	193	210	226	243	259	275	292	308	3 5,1
265		325	341	357	374	390	406	423	439	455	472	4 6,8
266		488	504	521	537	553	570	586	602	619	635	5 8,5
267		651	667	684	700	716	732	749	765	781	797	6 10,2
268		813	830	846	862	878	894	911	927	943	959	7 11,9
269		975	991	*008	*024	*040	*056	*072	*088	*104	*120	8 13,6
270	43	186	192	199	185	201	217	233	249	265	281	9 15,3
271		297	313	329	345	361	377	393	409	425	441	16
272		457	473	489	505	521	537	553	569	584	600	1 1,6
273		616	632	648	664	680	696	712	727	743	759	2 3,2
274		775	791	807	823	838	854	870	886	902	917	3 4,8
275		983	949	965	981	996	*012	*028	*044	*059	*075	4 6,4
276	44	091	107	123	138	154	170	185	201	217	232	5 8,0
277		243	264	279	295	311	326	342	358	373	389	6 9,6
278		404	420	436	451	467	483	498	514	529	545	7 11,2
279		560	576	592	607	623	638	654	669	685	700	8 12,8
280		716	731	747	762	778	793	809	824	840	855	9 14,4
281		871	886	902	917	932	948	963	979	994	*010	15
282	45	025	040	056	071	086	102	117	133	148	163	1 1,5
283		179	194	209	225	240	255	271	286	301	317	2 3,0
284		332	347	362	378	393	408	423	439	454	469	3 4,5
285		484	500	515	530	545	561	576	591	606	621	4 6,0
286		637	652	667	682	697	712	728	743	758	773	5 7,5
287		788	803	818	834	849	864	879	894	909	924	6 9,0
288		989	954	969	984	*000	*015	*030	*045	*060	*075	7 10,5
289	46	090	105	120	135	150	165	180	195	210	225	8 12,0
290		240	255	270	285	300	315	330	345	359	374	9 13,5
291		389	404	419	434	449	464	479	494	509	523	14
292		533	548	563	578	593	618	627	642	657	672	1 1,4
293		687	702	716	731	746	761	776	790	805	820	2 2,8
294		835	850	864	879	894	909	923	938	953	967	3 4,2
295		983	997	*012	*026	*041	*056	*070	*085	*100	*114	4 5,6
296	47	129	144	159	173	188	202	217	232	246	261	5 7,0
297		276	290	305	319	334	349	363	378	392	407	6 8,4
298		422	436	451	465	480	494	509	524	538	553	7 9,8
299		567	582	596	611	625	640	654	669	683	698	8 11,2
300		712	727	741	756	770	784	799	813	828	842	9 12,6
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<b>300</b>	47	712	727	741	756	770	784	799	818	828	842	
301		857	871	885	900	914	929	943	958	972	986	
302	45	001	015	029	044	058	073	087	101	116	130	
303		144	159	173	187	202	216	230	244	259	273	
304		287	302	316	330	344	359	373	387	401	416	
305		430	444	458	473	487	501	515	530	544	558	
306		572	586	601	615	629	643	657	671	686	700	
307		714	728	742	756	770	785	799	818	827	841	
308		855	869	883	897	911	926	940	954	968	982	
309		996	010	024	038	052	066	080	094	108	122	
<b>310</b>	49	136	150	164	178	192	206	220	234	248	262	
311		276	290	304	318	332	346	360	374	388	402	
312		415	429	443	457	471	485	499	513	527	541	
313		554	568	582	596	610	624	638	651	665	679	
314		693	707	721	734	748	762	776	790	808	817	
315		831	845	859	872	886	900	914	927	941	955	
316		969	982	996	010	024	037	051	065	079	092	
317	50	106	120	133	147	161	174	188	202	215	229	
318		243	256	270	284	297	311	325	338	352	365	
319		379	393	406	420	433	447	461	474	488	501	
<b>320</b>		515	529	542	556	569	583	596	610	623	637	
321		651	664	678	691	705	718	732	745	759	772	
322		736	749	763	776	790	803	816	829	842	855	
323		820	834	847	861	874	887	900	914	927	940	
324	51	055	068	081	095	108	121	135	148	162	175	
325		188	202	215	228	242	255	269	282	295	308	
326		322	335	348	362	375	388	402	415	428	441	
327		455	468	481	495	508	521	534	548	561	574	
328		557	570	584	597	610	624	637	650	664	677	
329		720	733	746	759	772	786	799	812	825	838	
<b>330</b>		851	864	878	891	904	917	930	943	957	970	
331		968	981	995	008	022	035	048	061	075	088	
332	52	114	127	140	153	166	179	192	205	218	231	
333		244	257	270	284	297	310	323	336	349	362	
334		375	388	401	414	427	440	453	466	479	492	
335		504	517	530	543	556	569	582	595	608	621	
336		634	647	660	673	686	699	712	725	737	750	
337		763	776	789	802	815	827	840	853	866	879	
338		892	905	917	930	943	956	969	982	994	007	
339	53	020	033	046	058	071	084	097	110	122	135	
<b>340</b>		143	156	169	182	195	212	224	237	250	263	
341		275	288	301	314	326	339	352	364	377	390	
342		403	415	428	441	453	466	479	491	504	517	
343		529	542	555	567	580	593	605	618	631	643	
344		656	668	681	694	706	719	732	744	757	769	
345		782	794	807	820	832	845	857	870	882	895	
346		908	920	933	945	958	970	983	995	008	020	
347	54	033	045	058	070	083	095	108	120	133	145	
348		153	165	178	190	203	215	228	240	253	265	
349		283	295	307	320	332	345	357	370	382	394	
<b>350</b>		407	419	432	444	456	469	481	494	506	518	
N.	L.	0	1	2	3	4	5	6	7	8	9	P. P.

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350	54	407	419	432	444	456	469	481	494	506	518	13 1 1,8 2 2,6 3 3,9 4 5,3 5 6,5 6 7,8 7 9,1 8 10,4 9 11,7
351		581	543	555	568	580	593	605	617	630	642	
352		654	667	679	691	704	716	728	741	753	765	
353		777	790	802	814	827	839	851	864	876	888	
354		900	918	925	937	949	962	974	986	998	1011	
355	55	023	085	047	060	072	084	096	108	121	133	
356		145	157	169	182	194	206	218	230	242	255	
357		267	279	291	303	315	328	340	352	364	376	
358		388	400	412	425	437	449	461	473	485	497	
359		509	522	534	546	558	570	582	594	606	618	
360		630	642	654	666	678	691	703	715	727	739	12 1 1,2 2 2,4 3 3,6 4 4,8 5 6,0 6 7,2 7 8,4 8 9,6 9 10,8
361		751	763	775	787	799	811	823	835	847	859	
362		871	883	895	907	919	931	943	955	967	979	
363		991	1003	1015	1027	1038	1050	1062	1074	1086	1098	
364	56	110	122	134	146	158	170	182	194	206	217	
365		229	241	253	265	277	289	301	312	324	336	
366		348	360	372	384	396	407	419	431	443	455	
367		467	478	490	502	514	526	538	549	561	573	
368		585	597	608	620	632	644	656	667	679	691	
369		708	714	726	738	750	761	773	785	797	808	
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371		937	949	961	972	984	996	1006	1019	1031	1043	
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373		171	183	194	206	217	229	241	252	264	276	
374		285	299	310	322	334	345	357	368	380	392	
375		403	415	426	438	449	461	473	484	496	507	
376		519	530	542	553	565	576	588	600	611	623	
377		634	646	657	669	680	692	703	715	726	738	
378		749	761	772	784	795	807	818	830	841	852	
379		864	875	887	898	910	921	933	944	955	967	
380		978	990	1001	1013	1024	1035	1047	1058	1070	1081	10 1 1,0 2 2,0 3 3,0 4 4,0 5 5,0 6 6,0 7 7,0 8 8,0 9 9,0
381	58	092	104	115	127	138	149	161	172	184	195	
382		206	218	229	240	252	263	274	285	297	309	
383		320	331	343	354	365	377	388	399	410	422	
384		433	444	456	467	478	490	501	512	524	535	
385		546	557	569	580	591	602	614	625	636	647	
386		659	670	681	692	704	715	726	737	749	760	
387		771	782	794	805	816	827	838	850	861	872	
388		883	894	906	917	928	939	950	961	973	984	
389		995	1006	1017	1028	1040	1051	1062	1073	1084	1095	
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391		218	229	240	251	262	273	284	295	306	318	
392		329	340	351	362	373	384	395	406	417	428	
393		439	450	461	472	483	494	506	517	528	539	
394		550	561	572	583	594	605	616	627	638	649	
395		660	671	682	693	704	715	726	737	748	759	
396		770	780	791	802	813	824	835	846	857	868	
397		879	890	901	912	923	934	945	956	966	977	
398		988	999	1010	1021	1032	1043	1054	1065	1076	1086	
399	60	097	108	119	130	141	152	163	173	184	195	
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N.	L.	0	1	2	3	4	5	6	7	8	9	

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400	60	206	217	228	239	249	260	271	282	293	304	11 1   1.1 2   2.2 3   3.3 4   4.4 5   5.5 6   6.6 7   7.7 8   8.8 9   9.9
401		314	325	336	347	358	369	379	390	401	412	
402		423	433	444	455	466	477	487	498	509	520	
403		531	541	552	563	574	584	595	606	617	627	
404		633	649	660	670	681	692	703	713	724	735	
405		746	756	767	778	788	799	810	821	831	842	
406		853	863	874	885	895	906	917	927	938	949	
407		959	970	981	991	002	013	023	034	045	055	
408	61	066	077	087	098	109	119	130	140	151	162	
409		172	183	194	204	215	225	236	247	257	268	
410		278	289	300	310	321	331	342	352	363	374	10 1   1.0 2   2.0 3   3.0 4   4.0 5   5.0 6   6.0 7   7.0 8   8.0 9   9.0
411		384	395	405	416	426	437	448	458	469	479	
412		490	500	511	521	532	542	553	563	574	584	
413		595	606	616	627	637	648	658	669	679	690	
414		700	711	721	731	742	752	763	773	784	794	
415		805	815	826	836	847	857	868	878	888	899	
416		909	920	930	941	951	962	973	983	993	003	
417	62	014	024	034	045	055	066	076	086	097	107	
418		118	128	138	149	159	170	180	190	201	211	
419		221	232	242	252	263	273	284	294	304	315	
420		325	335	346	356	366	377	387	397	408	418	9 1   0.9 2   1.8 3   2.7 4   3.6 5   4.5 6   5.4 7   6.3 8   7.2 9   8.1
421		428	439	449	459	469	480	490	500	511	521	
422		531	542	552	562	572	583	593	603	613	624	
423		634	644	655	665	675	685	696	706	716	726	
424		737	747	757	767	778	788	798	808	818	829	
425		839	849	859	870	880	890	900	910	921	931	
426		941	951	961	972	982	992	002	012	022	033	
427	63	043	053	063	073	083	094	104	114	124	134	
428		144	155	165	175	185	195	205	215	225	236	
429		246	256	266	276	286	296	306	317	327	337	
430		347	357	367	377	387	397	407	417	428	438	8 1   0.8 2   1.6 3   2.4 4   3.2 5   4.0 6   4.8 7   5.6 8   6.4 9   7.2
431		448	458	468	478	488	498	508	518	528	538	
432		548	558	568	579	589	599	609	619	629	639	
433		649	659	669	679	689	699	709	719	729	739	
434		749	759	769	779	789	799	809	819	829	839	
435		849	859	869	879	889	899	909	919	929	939	
436		949	959	969	979	989	999	009	019	029	039	
437	64	048	058	068	078	088	098	108	118	128	137	
438		147	157	167	177	187	197	207	217	227	237	
439		246	256	266	276	286	296	306	316	326	336	
440		345	355	365	375	385	395	404	414	424	434	7 1   0.7 2   1.4 3   2.1 4   2.8 5   3.5 6   4.2 7   4.9 8   5.6 9   6.3
441		444	454	464	473	483	493	503	513	523	532	
442		542	552	562	572	582	591	601	611	621	631	
443		640	650	660	670	680	689	699	709	719	729	
444		738	748	758	768	777	787	797	807	816	826	
445		836	846	856	865	875	885	895	904	914	924	
446		933	943	953	963	973	982	992	002	011	021	
447	65	031	040	050	060	070	079	089	099	108	118	
448		128	137	147	157	167	176	186	196	205	215	
449		225	234	244	254	263	273	283	292	302	312	
450		321	331	341	350	360	369	379	389	398	408	6 1   0.6 2   1.2 3   1.8 4   2.4 5   3.0 6   3.6 7   4.2 8   4.8 9   5.4
N.	L.	0	1	2	3	4	5	6	7	8	9	P. P.

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450	65	821	831	841	850	860	869	879	889	898	408	
451		418	427	437	447	456	466	475	485	495	504	
452		514	523	533	543	552	562	571	581	591	600	
453		610	619	629	639	648	658	667	677	686	696	
454		706	715	725	734	744	753	763	773	782	792	
455		801	811	820	830	839	849	858	868	877	887	10
456		896	906	916	925	935	944	954	963	973	983	1 1,0
457		992	001	011	020	030	039	049	058	068	077	2 2,0
458	66	087	096	106	115	124	134	143	153	162	172	3 3,0
459		181	191	200	210	219	229	238	247	257	266	4 4,0
460		276	285	295	304	314	323	333	342	351	361	5 5,0
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465		745	755	764	773	783	792	801	811	820	829	
466		839	848	857	867	876	885	894	904	913	923	
467		932	941	950	960	969	978	987	997	006	015	
468	67	025	034	043	052	062	071	080	089	099	108	
469		117	127	136	145	154	164	173	182	191	201	
470		210	219	228	237	247	256	265	274	284	293	
471		302	311	321	330	339	348	357	367	376	385	
472		394	403	412	422	431	440	449	459	468	477	
473		486	495	504	514	523	532	541	550	560	569	
474		578	587	596	605	614	624	633	642	651	660	
475		669	679	688	697	706	715	724	733	742	752	
476		761	770	779	788	797	806	815	824	834	843	
477		852	861	870	879	888	897	906	916	925	934	
478		943	952	961	970	979	988	997	006	015	024	
479	68	034	043	052	061	070	079	088	097	106	115	
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481		215	224	233	242	251	260	269	278	287	296	
482		305	314	323	332	341	350	359	368	377	386	
483		395	404	413	422	431	440	449	458	467	476	
484		485	494	503	511	520	529	538	547	556	565	
485		574	583	592	601	610	619	628	637	646	655	
486		664	673	681	690	699	708	717	726	735	744	
487		753	762	771	780	789	797	806	815	824	833	
488		842	851	860	869	878	886	895	904	913	922	
489		931	940	949	958	966	975	984	993	002	011	
490	69	020	028	037	046	055	064	073	082	090	099	
491		108	117	126	135	144	152	161	170	179	188	
492		197	205	214	223	232	241	249	258	267	276	
493		285	293	302	311	320	329	338	346	355	364	
494		373	381	390	399	408	417	425	434	443	452	
495		461	469	478	487	496	504	513	522	531	539	
496		548	557	566	574	583	592	601	609	618	627	
497		636	644	653	662	671	679	688	697	705	714	
498		723	732	740	749	758	767	775	784	793	801	
499		810	819	827	836	845	854	862	871	880	888	
500		897	906	914	923	932	940	949	958	966	975	
N.	L.	0	1	2	3	4	5	6	7	8	9	P. P.

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N.	L.	0	1	2	8	4	5	6	7	8	9	P. P.
500	69	897	906	914	928	982	940	949	958	966	975	
501		984	992	*001	*010	*018	*027	*086	*044	*058	*062	
502	70	070	079	088	096	105	114	122	131	140	148	
503		157	165	174	183	191	200	209	217	226	234	
504		243	252	260	269	278	286	295	303	312	321	
505		329	338	346	355	364	372	381	389	398	406	
506		415	424	433	441	449	458	467	475	484	492	
507		501	509	518	526	535	544	552	561	569	578	
508		586	595	603	612	621	629	638	646	655	663	
509		672	680	689	697	706	714	723	731	740	749	
510		757	766	774	783	791	800	808	817	825	834	
511		842	851	859	868	876	885	893	902	910	919	
512		927	935	944	952	961	969	978	986	995	*008	
513	71	012	020	029	037	046	054	063	071	079	088	
514		096	105	113	122	130	139	147	155	164	172	
515		181	189	198	206	214	223	231	240	248	257	
516		265	273	282	290	299	307	315	324	332	341	
517		349	357	366	374	383	391	399	408	416	425	
518		433	441	450	458	466	475	483	492	500	508	
519		517	525	533	542	550	559	567	575	584	592	
520		600	609	617	625	634	642	650	659	667	675	
521		684	692	700	709	717	725	734	742	750	759	
522		767	775	784	792	800	809	817	825	834	842	
523		850	858	867	875	883	892	900	908	917	925	
524		938	941	950	958	966	975	983	991	999	*008	
525	72	016	024	032	041	049	057	066	074	082	090	
526		099	107	115	123	132	140	148	156	165	173	
527		181	189	198	206	214	222	230	239	247	255	
528		268	276	284	293	299	304	313	321	329	337	
529		346	354	363	370	378	387	395	403	411	419	
530		428	436	444	452	460	469	477	485	493	501	
531		509	518	526	534	542	550	558	567	575	583	
532		591	599	607	616	624	632	640	648	656	665	
533		678	687	695	697	705	713	722	730	738	746	
534		754	762	770	779	787	795	803	811	819	827	
535		835	843	852	860	868	876	884	892	900	908	
536		916	925	933	941	949	957	965	973	981	989	
537		997	*006	*014	*022	*030	*038	*046	*054	*062	*070	
538	73	078	086	094	102	111	119	127	135	143	151	
539		159	167	175	183	191	199	207	215	223	231	
540		239	247	255	263	272	280	288	296	304	312	
541		320	328	336	344	352	360	368	376	384	392	
542		400	408	416	424	432	440	448	456	464	472	
543		480	488	496	504	512	520	528	536	544	552	
544		560	568	576	584	592	600	608	616	624	632	
545		640	648	656	664	672	679	687	695	703	711	
546		719	727	735	743	751	759	767	775	783	791	
547		799	807	815	823	830	838	846	854	862	870	
548		878	886	894	902	910	918	926	934	941	949	
549		957	965	973	981	989	997	*005	*013	*020	*028	
550	74	086	044	052	060	068	076	084	092	099	107	
N.	L.	0	1	2	8	4	5	6	7	8	9	P. P.

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5 | 4,0  
6 | 4,8  
7 | 5,6  
8 | 6,4  
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N.	L.	0	1	2	3	4	5	6	7	8	9	P. P.
550	74	086	044	052	060	068	076	084	092	099	107	8 1 0,8 2 1,6 3 2,4 4 3,2 5 4,0 6 4,8 7 5,6 8 6,4 9 7,2
551	115	128	181	189	147		155	162	170	178	186	
552	194	202	210	218	225		233	241	249	257	265	
553	273	280	288	296	304		312	320	327	335	343	
554	351	359	367	374	382		390	398	406	414	421	
555	439	437	445	453	461		468	476	484	492	500	
556	507	515	523	531	539		547	554	562	570	578	
557	586	593	601	609	617		624	632	640	648	656	
558	638	671	679	687	695		702	710	718	726	733	
559	741	749	757	764	772		780	788	796	803	811	
560	819	827	834	842	850		858	865	873	881	889	7 1 0,7 2 1,4 3 2,1 4 2,8 5 3,5 6 4,2 7 4,9 8 5,6 9 6,3
561	896	904	912	920	927		935	943	950	958	966	
562	974	981	989	997	005		012	020	028	035	043	
563	75	051	059	066	074	082	089	097	105	113	120	
564	128	136	143	151	159		166	174	182	189	197	
565	205	213	220	228	236		243	251	259	266	274	
566	282	289	297	305	312		320	328	335	343	351	
567	358	366	374	381	389		397	404	412	420	427	
568	435	442	450	458	465		473	481	488	496	504	
569	511	519	526	534	542		549	557	565	572	580	
570	587	595	603	610	618		626	633	641	648	656	7 1 0,7 2 1,4 3 2,1 4 2,8 5 3,5 6 4,2 7 4,9 8 5,6 9 6,3
571	664	671	679	686	694		702	709	717	724	732	
572	740	747	755	762	770		778	785	793	800	808	
573	815	823	831	838	846		853	861	868	876	884	
574	891	899	906	914	921		929	937	944	952	959	
575	967	974	982	989	997		005	012	020	027	035	
576	76	042	050	057	065	072	080	087	095	103	110	
577	118	125	133	140	148		155	163	170	178	185	
578	193	200	208	215	223		230	238	245	253	260	
579	268	275	283	290	298		305	313	320	328	335	
580	343	350	358	365	373		380	388	395	403	410	7 1 0,7 2 1,4 3 2,1 4 2,8 5 3,5 6 4,2 7 4,9 8 5,6 9 6,3
581	418	425	433	440	448		455	462	470	477	485	
582	492	500	507	515	522		530	537	545	553	559	
583	567	574	582	589	597		604	612	619	626	634	
584	641	649	656	664	671		678	686	693	701	708	
585	716	723	730	738	745		753	760	768	775	782	
586	790	797	805	812	819		827	834	842	849	856	
587	864	871	879	886	893		901	908	916	923	930	
588	938	945	953	960	967		975	982	989	997	004	
589	77	012	019	026	034	041	048	056	063	070	078	
590	085	093	100	107	115		122	129	137	144	151	7 1 0,7 2 1,4 3 2,1 4 2,8 5 3,5 6 4,2 7 4,9 8 5,6 9 6,3
591	159	166	173	181	188		195	203	210	217	225	
592	232	240	247	254	262		269	276	283	291	298	
593	305	313	320	327	335		342	349	357	364	371	
594	379	386	393	401	408		415	423	430	437	444	
595	452	459	466	474	481		488	495	503	510	517	
596	525	532	539	546	554		561	568	576	583	590	
597	597	605	612	619	627		634	641	648	656	663	
598	670	677	685	692	699		706	714	721	728	735	
599	743	750	757	764	772		779	786	793	801	808	
600	815	822	830	837	844		851	859	866	873	880	
N.	L.	0	1	2	3	4	5	6	7	8	9	P. P.

N.	L	0	1	2	3	4	5	6	7	8	9	P. P.
600	77	815	822	880	887	844	851	859	866	878	880	<div>8</div> <div>1   0,8</div> <div>2   1,6</div> <div>3   2,4</div> <div>4   3,2</div> <div>5   4,0</div> <div>6   4,8</div> <div>7   5,6</div> <div>8   6,4</div> <div>9   7,2</div>
601		887	895	903	909	916	924	981	988	945	952	
602		960	967	974	981	988	996	008	010	017	025	
603	78	082	089	046	058	061	068	075	082	069	097	
604		104	111	118	125	133	140	147	154	161	168	
605		176	183	190	197	204	211	219	226	233	240	
606		247	254	263	269	276	288	290	297	305	313	
607		319	326	333	340	347	355	362	369	376	383	
608		390	398	405	412	419	426	433	440	447	455	
609		462	469	476	483	490	497	504	512	519	526	
610		538	540	547	554	561	569	576	583	590	597	<div>7</div> <div>1   0,7</div> <div>2   1,4</div> <div>3   2,1</div> <div>4   2,8</div> <div>5   3,5</div> <div>6   4,2</div> <div>7   4,9</div> <div>8   5,6</div> <div>9   6,3</div>
611		604	611	618	625	633	640	647	654	661	668	
612		675	682	689	696	704	711	718	725	732	739	
613		746	753	760	767	774	781	789	796	803	810	
614		817	824	831	838	845	852	859	866	873	880	
615		888	895	902	909	916	923	930	937	944	951	
616		958	965	972	979	986	993	000	007	014	021	
617	79	029	036	043	050	057	064	071	078	085	092	
618		099	106	113	120	127	134	141	148	155	162	
619		169	176	183	190	197	204	211	218	225	232	
620		239	246	253	260	267	274	281	288	295	302	<div>6</div> <div>1   0,6</div> <div>2   1,2</div> <div>3   1,8</div> <div>4   2,4</div> <div>5   3,0</div> <div>6   3,6</div> <div>7   4,2</div> <div>8   4,8</div> <div>9   5,4</div>
621		309	316	323	330	337	344	351	358	365	372	
622		379	386	393	400	407	414	421	428	435	443	
623		449	456	463	470	477	484	491	498	505	511	
624		518	525	532	539	546	553	560	567	574	581	
625		588	595	602	609	616	623	630	637	644	650	
626		657	664	671	678	685	692	699	706	713	720	
627		727	734	741	748	754	761	768	775	782	789	
628		796	803	810	817	824	831	837	844	851	858	
629		865	872	879	886	893	900	906	913	920	927	
630		934	941	948	955	962	969	975	982	989	996	<div>5</div> <div>1   0,5</div> <div>2   1,0</div> <div>3   1,5</div> <div>4   2,0</div> <div>5   2,5</div> <div>6   3,0</div> <div>7   3,5</div> <div>8   4,0</div> <div>9   4,5</div>
631	80	008	010	017	024	030	037	044	051	058	065	
632		073	079	085	092	099	106	113	120	127	134	
633		140	147	154	161	168	175	182	188	195	202	
634		209	216	223	229	236	243	250	257	264	271	
635		277	284	291	298	305	312	318	325	332	339	
636		346	353	359	366	373	380	387	393	400	407	
637		414	421	428	434	441	448	455	462	468	475	
638		482	489	496	502	509	516	523	530	536	543	
639		550	557	564	570	577	584	591	598	604	611	
640		618	625	632	638	645	652	659	665	672	679	<div>4</div> <div>1   0,4</div> <div>2   0,8</div> <div>3   1,2</div> <div>4   1,6</div> <div>5   2,0</div> <div>6   2,4</div> <div>7   2,8</div> <div>8   3,2</div> <div>9   3,6</div>
641		686	693	699	706	713	720	726	733	740	747	
642		754	760	767	774	781	787	794	801	808	814	
643		821	828	835	841	848	855	862	868	875	882	
644		889	895	902	909	916	922	929	936	943	949	
645		956	963	969	976	983	990	996	003	010	017	
646	81	023	030	037	043	050	057	064	070	077	084	
647		090	097	104	111	117	124	131	137	144	151	
648		158	164	171	178	184	191	198	204	211	218	
649		224	231	238	245	251	258	265	271	278	285	
650		291	298	305	311	318	325	331	338	345	351	P. P.
N.	L	0	1	2	3	4	5	6	7	8	9	

N.	L.	0	1	2	8	4	5	6	7	8	9	P. P.
650	81	291	298	305	811	818	825	881	888	845	851	<div>7</div> <div>1   0,7</div> <div>2   1,4</div> <div>3   2,1</div> <div>4   2,8</div> <div>5   3,5</div> <div>6   4,2</div> <div>7   4,9</div> <div>8   5,6</div> <div>9   6,3</div>
651		858	865	871	878	885	891	898	405	411	418	
652		425	481	488	445	451	458	465	471	478	485	
653		491	498	505	511	518	525	581	588	544	551	
654		558	564	571	578	584	591	598	604	611	617	
655		694	681	687	644	651	657	664	671	677	684	
656		690	697	704	710	717	723	730	737	743	750	
657		757	763	770	776	783	790	796	803	809	816	
658		823	829	836	842	849	856	862	869	875	882	
659		889	895	902	908	915	921	928	935	941	948	
660		954	961	968	974	981	987	994	000	007	014	<div>6</div> <div>1   0,6</div> <div>2   1,3</div> <div>3   1,8</div> <div>4   2,4</div> <div>5   3,0</div> <div>6   3,6</div> <div>7   4,2</div> <div>8   4,8</div> <div>9   5,4</div>
661	89	020	027	033	040	046	053	060	066	073	079	
662		086	092	099	105	112	119	125	132	138	145	
663		151	158	164	171	178	184	191	197	204	210	
664		217	223	230	236	243	249	256	263	269	276	
665		283	289	295	302	308	315	321	328	334	341	
666		347	354	360	367	373	380	387	393	400	406	
667		413	419	426	432	439	445	452	458	465	471	
668		478	484	491	497	504	510	517	523	530	536	
669		543	549	556	562	569	575	582	588	595	601	
670		607	614	620	627	633	640	646	653	659	666	<div>5</div> <div>1   0,5</div> <div>2   1,2</div> <div>3   1,7</div> <div>4   2,3</div> <div>5   2,9</div> <div>6   3,5</div> <div>7   4,1</div> <div>8   4,7</div> <div>9   5,3</div>
671		673	679	685	692	698	705	711	718	724	730	
672		737	743	750	756	763	769	776	782	789	795	
673		803	808	814	821	827	834	840	847	853	860	
674		866	872	879	885	892	898	905	911	918	924	
675		930	937	943	950	956	963	969	975	982	988	
676		995	001	008	014	020	027	033	040	046	052	
677	88	059	065	072	078	085	091	097	104	110	117	
678		123	129	136	142	149	155	161	168	174	181	
679		187	193	200	206	213	219	225	232	238	245	
680		251	257	264	270	276	283	289	296	302	308	<div>4</div> <div>1   0,4</div> <div>2   1,1</div> <div>3   1,6</div> <div>4   2,2</div> <div>5   2,8</div> <div>6   3,4</div> <div>7   4,0</div> <div>8   4,6</div> <div>9   5,2</div>
681		315	321	327	334	340	347	353	359	366	372	
682		378	385	391	398	404	410	417	423	429	436	
683		442	448	455	461	467	474	480	487	493	499	
684		506	512	518	525	531	537	544	550	556	563	
685		569	575	582	588	594	601	607	613	620	626	
686		632	639	645	651	658	664	670	677	683	689	
687		696	702	708	715	721	727	734	740	746	753	
688		759	765	771	778	784	790	797	803	809	816	
689		822	828	835	841	847	853	860	866	872	879	
690		885	891	897	904	910	916	923	929	935	942	<div>3</div> <div>1   0,3</div> <div>2   1,0</div> <div>3   1,5</div> <div>4   2,1</div> <div>5   2,7</div> <div>6   3,3</div> <div>7   3,9</div> <div>8   4,5</div> <div>9   5,1</div>
691		948	954	960	967	973	979	985	992	998	004	
692	94	011	017	023	029	036	042	048	055	061	067	
693		073	080	086	092	098	105	111	117	123	130	
694		136	143	148	155	161	167	173	180	186	192	
695		198	205	211	217	223	230	236	242	248	255	
696		261	267	273	280	286	292	298	305	311	317	
697		323	330	336	342	348	354	361	367	373	379	
698		386	392	398	404	410	417	423	429	435	442	
699		448	454	460	466	473	479	485	491	497	504	
700		510	516	522	528	535	541	547	553	559	566	<div>2</div> <div>1   0,2</div> <div>2   0,9</div> <div>3   1,4</div> <div>4   2,0</div> <div>5   2,6</div> <div>6   3,2</div> <div>7   3,8</div> <div>8   4,4</div> <div>9   5,0</div>
N.	L.	0	1	2	8	4	5	6	7	8	9	P. P.

N.	L.	0	1	2	3	4	5	6	7	8	9	P. P.
700	84	510	516	522	528	535	541	547	553	559	566	
701		573	578	584	590	597	603	609	615	621	628	
702		634	640	646	652	658	665	671	677	683	689	
703		696	702	708	714	720	726	732	739	745	751	
704		757	763	770	776	782	788	794	800	807	813	
705		819	825	831	837	844	850	856	862	868	874	
706		880	887	893	899	905	911	917	924	930	936	
707		943	948	954	960	967	973	979	985	991	997	
708	85	008	009	016	022	028	034	040	046	052	058	
709		065	071	077	083	089	095	101	107	114	120	
710		126	132	138	144	150	156	163	169	175	181	
711		187	193	199	205	211	217	224	230	236	242	
712		248	254	260	266	272	278	285	291	297	303	
713		309	315	321	327	333	339	345	352	358	364	
714		370	376	382	388	394	400	406	412	418	425	
715		431	437	443	449	455	461	467	473	479	485	
716		491	497	503	509	516	522	528	534	540	546	
717		552	558	564	570	576	582	588	594	600	606	
718		612	618	625	631	637	643	649	655	661	667	
719		673	679	685	691	697	703	709	715	721	727	
720		733	739	745	751	757	763	769	775	781	788	
721		794	800	806	812	818	824	830	836	842	848	
722		854	860	866	872	878	884	890	896	902	908	
723		914	920	926	932	938	944	950	956	962	968	
724		974	980	986	992	998	004	010	016	022	028	
725	86	034	040	046	052	058	064	070	076	082	088	
726		094	100	106	112	118	124	130	136	141	147	
727		153	159	165	171	177	183	189	195	201	207	
728		213	219	225	231	237	243	249	255	261	267	
729		273	279	285	291	297	303	308	314	320	326	
730		332	338	344	350	356	362	368	374	380	386	
731		392	398	404	410	415	421	427	433	439	445	
732		451	457	463	469	475	481	487	493	499	504	
733		510	516	522	528	534	540	546	552	558	564	
734		570	576	581	587	593	599	605	611	617	623	
735		629	635	641	646	652	658	664	670	676	682	
736		688	694	700	705	711	717	723	729	735	741	
737		747	753	759	764	770	776	782	788	794	800	
738		806	812	817	823	829	835	841	847	853	859	
739		864	870	876	882	888	894	900	906	911	917	
740		923	929	935	941	947	953	958	964	970	976	
741		982	988	994	999	005	011	017	023	029	035	
742	87	040	046	052	058	064	070	075	081	087	093	
743		099	105	111	116	122	128	134	140	146	151	
744		157	163	169	175	181	186	192	198	204	210	
745		216	221	227	233	239	245	251	256	262	268	
746		274	280	286	291	297	303	309	315	320	326	
747		332	338	344	349	355	361	367	373	379	384	
748		390	396	402	408	413	419	425	431	437	442	
749		448	454	460	466	471	477	483	489	495	500	
750		506	512	518	523	529	535	541	547	552	558	
N.	L.	0	1	2	3	4	5	6	7	8	9	P. P.



N.	L.	0	1	2	3	4	5	6	7	8	9	P. P.
750	87	506	512	518	523	529	535	541	547	552	558	1 0,6 2 1,2 3 1,8 4 2,4 5 3,0 6 3,6 7 4,2 8 4,8 9 5,4
751		564	570	576	581	587	593	599	604	610	616	
752		622	628	633	639	645	651	656	662	668	674	
753		679	685	691	697	703	708	714	720	726	731	
754		737	743	749	754	760	766	772	777	783	789	
755		795	800	806	812	818	823	829	835	841	846	
756		853	858	864	869	875	881	887	892	898	904	
757		910	915	921	927	933	938	944	950	955	961	
758		967	973	978	984	990	996	001	007	013	018	
759	88	024	030	036	041	047	053	058	064	070	076	
760		081	087	093	098	104	110	116	121	127	133	1 0,6 2 1,2 3 1,8 4 2,4 5 3,0 6 3,6 7 4,2 8 4,8 9 5,4
761		138	144	150	156	161	167	173	178	184	190	
762		195	201	207	213	218	224	230	235	241	247	
763		252	258	264	270	275	281	287	292	298	304	
764		309	315	321	326	332	338	343	349	355	360	
765		366	372	377	383	389	395	400	406	412	417	
766		423	429	434	440	446	451	457	463	468	474	
767		480	485	491	497	503	508	513	519	525	530	
768		536	542	547	553	559	564	570	576	581	587	
769		593	598	604	610	615	621	627	632	638	643	
770		649	655	660	666	672	677	683	689	694	700	1 0,6 2 1,2 3 1,8 4 2,4 5 3,0 6 3,6 7 4,2 8 4,8 9 5,4
771		705	711	717	722	728	734	739	745	750	756	
772		762	767	773	779	784	790	795	801	807	812	
773		818	824	829	835	840	846	852	857	863	868	
774		874	880	885	891	897	903	908	913	919	925	
775		930	936	941	947	953	958	964	969	975	981	
776		986	992	997	003	009	014	020	025	031	037	
777	89	042	048	053	059	064	070	076	081	087	092	
778		098	104	109	115	120	126	131	137	143	148	
779		154	159	165	170	176	182	187	193	198	204	
780		209	215	221	226	232	237	243	248	254	260	1 0,6 2 1,2 3 1,8 4 2,4 5 3,0 6 3,6 7 4,2 8 4,8 9 5,4
781		265	271	276	282	287	293	298	304	310	315	
782		321	326	332	337	343	348	354	360	365	371	
783		376	382	387	393	398	404	409	415	421	426	
784		432	437	443	448	454	459	465	470	476	481	
785		487	492	498	504	509	515	520	526	531	537	
786		542	548	553	559	564	570	575	581	586	592	
787		597	603	609	614	620	625	631	636	642	647	
788		653	658	664	669	675	680	686	691	697	702	
789		708	713	719	724	730	735	741	746	752	757	
790		763	768	774	779	785	790	796	801	807	812	1 0,6 2 1,2 3 1,8 4 2,4 5 3,0 6 3,6 7 4,2 8 4,8 9 5,4
791		818	823	829	834	840	845	851	856	862	867	
792		873	878	883	889	894	900	905	911	916	922	
793		927	933	938	944	949	955	960	966	971	977	
794		982	988	993	998	004	009	015	020	026	031	
795	90	037	042	048	053	059	064	069	075	080	086	
796		091	097	102	108	113	119	124	129	135	140	
797		146	151	157	162	168	173	179	184	189	195	
798		200	206	211	217	222	227	233	238	244	249	
799		255	260	266	271	276	282	287	293	298	304	
800		309	314	320	325	331	336	342	347	352	358	P. P.
N.	L.	0	1	2	3	4	5	6	7	8	9	

N.	L.	0	1	2	3	4	5	6	7	8	9	P. P.
<b>800</b>	90	809	814	820	825	831	886	842	847	852	858	<div>6</div> <div>1   0,6</div> <div>2   1,2</div> <div>3   1,8</div> <div>4   2,4</div> <div>5   3,0</div> <div>6   3,6</div> <div>7   4,2</div> <div>8   4,8</div> <div>9   5,4</div>
801		868	869	874	880	885	890	896	401	407	412	
802		417	428	428	434	439	445	450	455	461	466	
808		473	477	482	488	498	499	504	509	515	520	
804		526	531	536	542	547	558	558	563	569	574	
805		580	585	590	596	601	607	612	617	622	628	
806		634	639	644	650	655	660	666	671	677	682	
807		687	698	698	708	709	714	720	725	730	736	
808		741	747	752	757	763	768	773	779	784	789	
809		795	800	806	811	816	822	827	832	838	843	
<b>810</b>		849	854	859	865	870	875	881	886	891	897	<div>6</div> <div>1   0,6</div> <div>2   1,2</div> <div>3   1,8</div> <div>4   2,4</div> <div>5   3,0</div> <div>6   3,6</div> <div>7   4,2</div> <div>8   4,8</div> <div>9   5,4</div>
811		902	907	918	918	924	929	934	940	945	950	
812		956	961	966	973	977	982	988	993	998	*004	
813	91	009	014	020	025	030	036	041	046	052	057	
814		062	068	073	078	084	089	094	100	105	110	
815		116	121	126	132	137	142	148	153	158	164	
816		169	174	180	185	190	196	201	206	212	217	
817		222	228	233	238	243	249	254	259	265	270	
818		275	281	286	291	297	302	307	312	318	323	
819		328	334	339	344	350	355	360	365	371	376	
<b>820</b>		381	387	392	397	403	408	413	418	424	429	<div>6</div> <div>1   0,6</div> <div>2   1,0</div> <div>3   1,5</div> <div>4   2,0</div> <div>5   2,5</div> <div>6   3,0</div> <div>7   3,5</div> <div>8   4,0</div> <div>9   4,5</div>
821		434	440	445	450	455	461	466	471	477	482	
822		487	492	498	503	508	514	519	524	529	535	
823		540	545	551	556	561	566	572	577	582	587	
824		598	598	603	609	614	619	624	630	635	640	
825		645	651	656	661	666	672	677	682	687	693	
826		698	708	709	714	719	724	730	735	740	745	
827		751	756	761	766	772	777	782	787	793	798	
828		808	808	814	819	824	829	834	840	845	850	
829		855	861	866	871	876	882	887	892	897	903	
<b>830</b>		908	913	918	924	929	934	939	944	950	955	<div>6</div> <div>1   0,5</div> <div>2   1,0</div> <div>3   1,5</div> <div>4   2,0</div> <div>5   2,5</div> <div>6   3,0</div> <div>7   3,5</div> <div>8   4,0</div> <div>9   4,5</div>
831		960	965	971	976	981	986	991	997	*002	*007	
832	92	012	018	023	028	033	038	044	049	054	059	
833		065	070	075	080	085	091	096	101	106	111	
834		117	122	127	132	137	143	148	153	158	163	
835		169	174	179	184	189	195	200	205	210	215	
836		221	226	231	236	241	247	252	257	262	267	
837		273	278	283	288	293	298	304	309	314	319	
838		324	330	335	340	345	350	355	361	366	371	
839		376	381	387	392	397	402	407	412	418	423	
<b>840</b>		428	433	438	443	449	454	459	464	469	474	<div>6</div> <div>1   0,5</div> <div>2   1,0</div> <div>3   1,5</div> <div>4   2,0</div> <div>5   2,5</div> <div>6   3,0</div> <div>7   3,5</div> <div>8   4,0</div> <div>9   4,5</div>
841		480	485	490	495	500	505	511	516	521	526	
842		531	536	542	547	552	557	562	567	572	578	
843		588	588	593	598	603	609	614	619	624	629	
844		634	639	645	650	655	660	665	670	675	681	
845		686	691	696	701	706	711	716	722	727	732	
846		737	742	747	752	758	763	768	773	778	783	
847		788	793	799	804	809	814	819	824	829	834	
848		840	845	850	855	860	865	870	875	881	886	
849		891	896	901	906	911	916	921	927	932	937	
<b>850</b>		942	947	952	957	962	967	973	978	983	988	<div>6</div> <div>1   0,5</div> <div>2   1,0</div> <div>3   1,5</div> <div>4   2,0</div> <div>5   2,5</div> <div>6   3,0</div> <div>7   3,5</div> <div>8   4,0</div> <div>9   4,5</div>
N.	L.	0	1	2	3	4	5	6	7	8	9	P. P.

N.	L.	0	1	2	3	4	5	6	7	8	9	P. P.
850	92	942	947	952	957	962	967	973	978	983	988	
851	998	998	008	008	018	018	018	024	029	034	039	
852	98	044	049	054	059	064	069	075	080	085	090	
853	095	100	105	110	115	120	125	131	136	141		
854	146	151	156	161	166	171	176	181	186	192		
855	197	202	207	212	217	222	227	233	237	242		
856	247	252	258	263	268	273	278	283	288	293		
857	298	303	308	313	318	323	328	334	339	344		
858	349	354	359	364	369	374	379	384	389	394		
859	399	404	409	414	420	425	430	435	440	445		
860	450	455	460	465	470	475	480	485	490	495		
861	500	505	510	515	520	526	531	536	541	546		
862	551	556	561	566	571	576	581	586	591	596		
863	601	606	611	616	621	626	631	636	641	646		
864	651	656	661	666	671	676	682	687	692	697		
865	702	707	712	717	722	727	732	737	742	747		
866	752	757	762	767	772	777	782	787	792	797		
867	802	807	812	817	822	827	832	837	842	847		
868	852	857	862	867	872	877	882	887	892	897		
869	902	907	912	917	922	927	932	937	942	947		
870	952	957	962	967	972	977	982	987	992	997		
871	94	002	007	012	017	022	027	032	037	042	047	
872	052	057	062	067	072	077	082	086	091	096		
873	101	106	111	116	121	126	131	136	141	146		
874	151	156	161	166	171	176	181	186	191	196		
875	201	206	211	216	221	226	231	236	240	245		
876	250	255	260	265	270	275	280	285	290	295		
877	300	305	310	315	320	325	330	335	340	345		
878	349	354	359	364	369	374	379	384	389	394		
879	399	404	409	414	419	424	429	433	438	443		
880	448	453	458	463	468	473	478	483	488	493		
881	498	503	507	512	517	522	527	532	537	542		
882	547	552	557	562	567	571	576	581	586	591		
883	596	601	606	611	616	621	626	630	635	640		
884	645	650	655	660	665	670	675	680	685	689		
885	694	699	704	709	714	719	724	729	734	738		
886	743	748	753	758	763	768	773	778	783	787		
887	792	797	802	807	812	817	822	827	832	836		
888	841	846	851	856	861	866	871	876	880	885		
889	890	895	900	905	910	915	919	924	929	934		
890	939	944	949	954	959	963	968	973	978	983		
891	988	993	998	002	007	012	017	022	027	032		
892	95	006	011	016	021	026	031	036	041	046		
893	055	060	065	070	075	080	085	090	095	100		
894	104	109	114	119	124	129	134	139	144	149		
895	154	159	164	169	174	179	184	189	194	199		
896	204	209	214	219	224	229	234	239	244	249		
897	254	259	264	269	274	279	284	289	294	299		
898	304	309	314	319	324	329	334	339	344	349		
899	354	359	364	369	374	379	384	389	394	399		
900	404	409	414	419	424	429	434	439	444	449		
N.	L.	0	1	2	3	4	5	6	7	8	9	P. P.

N.	L.	0	1	2	3	4	5	6	7	8	9	P. P.
900	95	424	429	434	439	444	448	453	458	463	468	<div>6</div> <div>1   0,5</div> <div>2   1,0</div> <div>3   1,5</div> <div>4   2,0</div> <div>5   2,5</div> <div>6   3,0</div> <div>7   3,5</div> <div>8   4,0</div> <div>9   4,5</div>
901		472	477	482	487	492	497	501	506	511	516	
902		521	525	530	535	540	545	550	554	559	564	
903		569	574	578	583	588	593	598	602	607	612	
904		617	622	626	631	636	641	646	650	655	660	
905		665	670	674	679	684	689	694	698	703	708	
906		713	718	722	727	732	737	742	746	751	756	
907		761	766	770	775	780	785	789	794	799	804	
908		809	813	818	823	828	833	837	842	847	852	
909		856	861	866	871	875	880	885	890	895	899	
910	904	909	914	918	923		928	933	938	942	947	
911	952	957	961	966	971		976	980	985	990	995	
912	999	004	009	014	019		023	028	033	038	042	
913	96	047	052	057	061	066	071	076	080	085	090	
914	095	099	104	109	114		118	123	128	133	137	
915	142	147	152	156	161		166	171	175	180	185	
916	190	194	199	204	209		218	218	223	227	232	
917	237	242	246	251	256		261	265	270	275	280	
918	284	289	294	298	303		308	313	317	322	327	
919	332	336	341	346	350		355	360	365	369	374	
920	379	384	388	393	398		402	407	412	417	421	
921	426	431	435	440	445		450	454	459	464	468	<div>4</div> <div>1   0,4</div> <div>2   0,8</div> <div>3   1,2</div> <div>4   1,6</div> <div>5   2,0</div> <div>6   2,4</div> <div>7   2,8</div> <div>8   3,2</div> <div>9   3,6</div>
922	473	478	483	487	492		497	501	506	511	515	
923	520	525	530	534	539		544	548	553	558	562	
924	567	572	577	581	586		591	595	600	605	609	
925	614	619	624	628	633		638	642	647	652	656	
926	661	666	670	675	680		685	689	694	699	703	
927	708	713	717	722	727		731	736	741	745	750	
928	755	759	764	769	774		778	783	788	792	797	
929	802	806	811	816	820		825	830	834	839	844	
930	843	848	853	857	862		867	872	876	881	886	
931	895	900	904	909	914		918	923	928	932	937	
932	942	946	951	956	960		965	970	974	979	984	
933	988	993	997	002	007		011	016	021	025	030	
934	97	085	089	044	049	053	058	063	067	072	077	
935	081	086	090	095	100		104	109	114	118	123	
936	128	132	137	142	146		151	155	160	165	169	
937	174	179	183	188	192		197	202	206	211	216	
938	220	225	230	234	239		243	248	253	257	262	
939	267	271	276	280	285		290	294	299	304	308	
940	313	317	322	327	331		336	340	345	350	354	
941	359	364	368	373	377		382	387	391	396	400	
942	405	410	414	419	424		428	433	437	442	447	
943	451	456	460	465	470		474	479	483	488	493	
944	497	502	506	511	516		520	525	529	534	539	
945	543	548	552	557	562		566	571	575	580	585	
946	589	594	598	603	607		612	617	621	626	630	
947	635	640	644	649	653		658	663	667	672	676	
948	681	685	690	695	699		704	708	713	717	722	
949	727	731	736	740	745		749	754	759	763	768	
950	772	777	782	786	791		795	800	804	809	813	
N.	L.	0	1	2	3	4	5	6	7	8	9	P. P.



	NUMBER.	LOGARITHM.
Base of Naperian logarithms . . . . .	$e = 2.71828183$	0.4342945
Modulus of common logarithms . . . . .	$u = 0.43429448$	9.6377843-10
Circumference of a circle in degrees . . . . .	$= 360$	2.5563025
Circumference of a circle in minutes . . . . .	$= 21600$	4.3344538
Circumference of a circle in seconds . . . . .	$= 1296000$	6.1126050
Radius of a circle in degrees . . . . .	$= 57.29578$	1.7581226
Radius of a circle in minutes . . . . .	$= 3437.7468$	3.5362739
Radius of a circle in seconds . . . . .	$= 206264.806$	5.3144251
Ratio of a circumference to diameter . . . . .	$\pi = 3.14159265$	0.4971499

NUMBER.	LOGARITHM.		
$2\pi = 6.28318531$	0.7981799	$\pi^2 = 9.86960440$	0.9942997
$4\pi = 12.56637061$	1.0992099	$\frac{1}{\pi^2} = 0.10132118$	9.0057003-10
$\frac{\pi}{2} = 1.57079633$	0.1961199	$\sqrt{\pi} = 1.77245385$	0.2485749
$\frac{\pi}{3} = 1.04719755$	0.0200286	$\frac{1}{\sqrt{\pi}} = 0.56418958$	9.7514251-10
$\frac{4\pi}{3} = 4.18879020$	0.6220886	$\sqrt{\frac{3}{\pi}} = 0.97720502$	9.9899857-10
$\frac{\pi}{4} = 0.78539816$	9.8950899-10	$\sqrt{\frac{4}{\pi}} = 1.12837917$	0.0524551
$\frac{\pi}{6} = 0.52359878$	9.7189986-10	$\sqrt[3]{\pi} = 1.46459189$	0.1657166
$\frac{1}{\pi} = 0.31830989$	9.5028501-10	$\frac{1}{\sqrt[3]{\pi}} = 0.68278406$	9.8342834-10
$\frac{1}{2\pi} = 0.15915494$	9.2018201-10	$\sqrt[3]{\pi^2} = 2.14502940$	0.3314332
$\frac{3}{\pi} = 0.95492966$	9.9799714-10	$\sqrt[3]{\frac{3}{\pi}} = 0.62035049$	9.7926371-10
$\frac{4}{\pi} = 1.27323954$	0.1049101	$\sqrt[3]{\frac{\pi}{6}} = 0.80599598$	9.9063329-10
$\frac{3}{4\pi} = 0.23873241$	9.3779114-10		

If the radius  $r = 1$ , the length of the arc is:

for 1 degree $= \frac{\pi}{180}$	$= 0.01745329$	8.2418774-16
for 1 minute $= \frac{\pi}{10800}$	$= 0.00029089$	6.4637261-16
for 1 second $= \frac{\pi}{648000}$	$= 0.00000485$	4.6855749-10
for $\frac{1}{2}$ degree $= \frac{\pi}{360}$	$= 0.00872665$	7.9408474-10
for $\frac{1}{2}$ minute $= \frac{\pi}{21600}$	$= 0.00014544$	6.1626961-10
for $\frac{1}{2}$ second $= \frac{\pi}{1296000}$	$= 0.00000242$	4.3845449-10
sin $1''$ in the unit circle $= 0.00000485$		4.6855749-10

# TABLE II.

## LOGARITHMS OF THE TRIGONOMETRIC FUNCTIONS,

From 0° to 1° and 89° to 90° for every second,

From 1° to 6° and 84° to 89° for every ten seconds,

From 6° to 84° for every minute.

L. Cos.		L. Sin.					0°		L. Tang.				
0.00	''	0''	1''	2''	3''	4''	5''		6''	7''	8''	9''	10''
000	0 0	4.	—	68557	98660	16270	28768	38454	46878	58067	58866	68982	68557
000	10	5.	68557	72697	76476	79952	83170	86167	88969	91602	94085	96438	98660
000	20		98660	00779	02900	04780	06579	08851	11005	11694	12378	14797	16270
000	30	6.	16270	17694	19073	20409	21705	22964	24188	25378	26536	27664	28768
000	40		28768	29836	30882	31904	32908	33879	34838	35767	36682	37577	38454
000	50		38454	39315	40158	40985	41797	42594	43378	44145	44900	45648	46378
000	1 0	6.4	6878	7090	7797	8492	9175	9849	0512	1165	1808	2442	3067
000	10	6.5	3067	3638	4291	4890	5481	6064	6639	7207	7767	8320	8866
000	20		8866	9406	9939	0465	0985	1499	2007	2509	3006	3496	3982
000	30	6.6	3982	4462	4936	5406	5870	6330	6785	7235	7680	8121	8557
000	40		8557	8990	9418	9841	0261	0676	1088	1496	1900	2300	2697
000	50	6.7	2697	3090	3479	3865	4248	4627	5008	5376	5746	6112	6476
000	2 0		6476	6886	7193	7548	7900	8248	8595	8938	9278	9616	9952
000	10		9952	0255	0615	0943	1268	1591	1911	2230	2545	2859	3170
000	20	6.8	3170	3479	3786	4091	4394	4694	4998	5289	5584	5876	6167
000	30		6167	6455	6742	7027	7310	7591	7870	8147	8428	8697	8969
000	40		8969	9240	9509	9776	0042	0306	0568	0829	1088	1346	1602
000	50	6.9	1602	1857	2110	2362	2612	2861	3109	3355	3599	3843	4085
000	3 0		4085	4325	4565	4803	5039	5275	5509	5742	5978	6204	6433
000	10		6433	6661	6889	7118	7338	7561	7788	8004	8224	8448	8666
000	20		8666	8877	9098	9307	9520	9738	9944	0155	0364	0572	0779
000	30	7.0	0779	0986	1191	1395	1599	1801	2008	2208	2408	2602	2800
000	40		2800	2997	3193	3388	3582	3776	3968	4160	4351	4541	4730
000	50		4730	4919	5106	5298	5479	5664	5849	6032	6215	6397	6579
000	4 0		6579	6759	6939	7118	7296	7474	7651	7827	8008	8177	8351
000	10		8351	8525	8699	8870	9041	9211	9381	9551	9719	9887	0055
000	20	7.1	0055	0222	0388	0553	0718	0882	1046	1209	1371	1538	1694
000	30		1694	1854	2014	2174	2338	2491	2648	2805	2962	3118	3273
000	40		3273	3428	3582	3736	3889	4042	4194	4346	4497	4647	4797
000	50		4797	4947	5096	5244	5392	5540	5687	5838	5979	6125	6270
0.00			10''	9''	8''	7''	6''	5''	4''	3''	2''	1''	0''

L. Sin.

L. Cos.

89°

L. Cotg.

	144	143	142	141	140	139		138	137	136	135	134	133	
1	14,4	14,3	14,2	14,1	14,0	13,9	1	13,8	13,7	13,6	13,5	13,4	13,3	1
2	28,8	28,6	28,4	28,2	28,0	27,8	2	27,6	27,4	27,2	27,0	26,8	26,6	2
3	43,2	42,9	42,6	42,3	42,0	41,7	3	41,4	41,1	40,8	40,5	40,2	39,9	3
4	57,6	57,2	56,8	56,4	56,0	55,6	4	55,2	54,8	54,4	54,0	53,6	53,2	4
5	72,0	71,5	71,0	70,5	70,0	69,5	5	69,0	68,5	68,0	67,5	67,0	66,5	5
6	86,4	85,8	85,2	84,6	84,0	83,4	6	82,8	82,2	81,6	81,0	80,4	79,8	6
7	100,8	100,1	99,4	98,7	98,0	97,3	7	96,6	95,9	95,2	94,5	93,8	93,1	7
8	115,2	114,4	113,6	112,8	112,0	111,2	8	110,4	109,6	108,8	108,0	107,2	106,4	8
9	129,6	128,7	127,8	126,9	126,0	125,1	9	124,2	123,3	122,4	121,5	120,6	119,7	9
	132	131	130	129	128	127		126	125	124	123	122	121	
1	12,2	12,1	12,0	11,9	11,8	11,7	1	12,6	12,5	12,4	12,3	12,2	12,1	1
2	26,4	26,2	26,0	25,8	25,6	25,4	2	25,2	25,0	24,8	24,6	24,4	24,2	2
3	39,6	39,3	39,0	38,7	38,4	38,1	3	37,8	37,5	37,2	36,9	36,6	36,3	3
4	52,8	52,4	52,0	51,6	51,2	50,8	4	50,4	50,0	49,6	49,2	48,8	48,4	4
5	66,0	65,5	65,0	64,5	64,0	63,5	5	63,0	62,5	62,0	61,5	61,0	60,5	5
6	79,2	78,6	78,0	77,4	76,8	76,2	6	75,6	75,0	74,4	73,8	73,2	72,6	6
7	92,4	91,7	91,0	90,3	89,6	88,9	7	88,2	87,5	86,8	86,1	85,4	84,7	7
8	105,6	104,8	104,0	103,2	102,4	101,6	8	100,8	100,0	99,2	98,4	97,6	96,8	8
9	118,8	117,9	117,0	116,1	115,2	114,3	9	113,4	112,5	111,6	110,7	109,8	108,9	9
	120	119	118	117	116	115		114	113	112	111	110	109	
1	12,0	11,9	11,8	11,7	11,6	11,5	1	11,4	11,3	11,2	11,1	11,0	10,9	1
2	24,0	23,8	23,6	23,4	23,2	23,0	2	22,8	22,6	22,4	22,2	22,0	21,8	2
3	36,0	35,7	35,4	35,1	34,8	34,5	3	34,2	33,9	33,6	33,3	33,0	32,7	3
4	48,0	47,6	47,2	46,8	46,4	46,0	4	45,6	45,2	44,8	44,4	44,0	43,6	4
5	60,0	59,5	59,0	58,5	58,0	57,5	5	57,0	56,5	56,0	55,5	55,0	54,5	5
6	72,0	71,4	70,8	70,2	69,6	69,0	6	68,4	67,8	67,2	66,6	66,0	65,4	6
7	84,0	83,3	82,6	81,9	81,2	80,5	7	79,8	79,1	78,4	77,7	77,0	76,3	7
8	96,0	95,2	94,4	93,6	92,8	92,0	8	91,2	90,4	89,6	88,8	88,0	87,2	8
9	108,0	107,1	106,2	105,3	104,4	103,5	9	102,6	101,7	100,8	99,9	99,0	98,1	9
0.00	' "	0"	1"	2"	3"	4"	5"	6"	7"	8"	9"	10"		
000	5 0	7.1	6270	6414	6558	6702	6845	6987	7130	7271	7413	7558	7694	50
000	10		7694	7834	7973	8112	8250	8389	8526	8668	8800	8937	9072	40
000	20		9072	9208	9348	9478	9612	9746	9879	10012	10145	10277	10409	30
000	30	7.2	0409	0540	0671	0802	0932	1062	1191	1320	1449	1577	1705	20
000	40		1705	1838	1960	2087	2218	2349	2465	2590	2715	2840	2964	10
000	50		2964	3088	3212	3335	3458	3580	3702	3824	3946	4067	4188	0 54
000	6 0		4188	4308	4428	4548	4668	4787	4906	5024	5142	5260	5378	50
000	10		5378	5495	5612	5728	5845	5961	6076	6192	6307	6421	6536	40
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000	30		7664	7775	7886	7997	8107	8217	8327	8437	8546	8655	8763	20
000	40		8763	8872	8980	9088	9196	9303	9410	9517	9623	9730	9836	10
000	50		9336	9442	9547	9652	9757	9862	9967	10071	10175	10279	10382	0 53
000	7 0	7.3	0832	0956	1089	1191	1294	1396	1498	1600	1702	1808	1904	50
000	10		1904	2005	2106	2206	2306	2406	2506	2606	2705	2804	2908	40
000	20		2908	3001	3100	3198	3296	3393	3491	3588	3685	3782	3879	30
000	30		3879	3975	4071	4167	4263	4359	4454	4549	4644	4739	4838	20
000	40		4838	4928	5022	5116	5209	5303	5396	5489	5582	5675	5767	10
000	50		5767	5860	5952	6044	6135	6227	6318	6409	6500	6591	6682	0 52
000	8 0		6682	6772	6862	6952	7042	7132	7221	7310	7399	7488	7577	50
000	10		7577	7666	7754	7842	7930	8018	8106	8193	8280	8367	8454	40
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000	40	7.4	0153	0241	0324	0408	0491	0573	0656	0739	0821	0908	0985	10
000	50		0985	1067	1149	1230	1312	1393	1474	1555	1636	1716	1797	0 51
000	9 0		1797	1877	1957	2037	2117	2197	2277	2356	2435	2515	2594	50
000	10		2594	2673	2751	2830	2908	2987	3065	3143	3221	3299	3376	40
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000	30		4145	4221	4297	4373	4449	4524	4600	4675	4750	4825	4900	20
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000	50		5643	5716	5790	5863	5936	6009	6082	6155	6228	6300	6373	0 50
0.00		10"	9"	8"	7"	6"	5"	4"	3"	2"	1"	0"	' "	



	108	107	106	105	104	103		102	101	99	98	97	96	
1	10.8	10.7	10.6	10.5	10.4	10.3	1	10.2	10.1	9.9	9.8	9.7	9.6	1
2	21.6	21.4	21.2	21.0	20.8	20.6	2	20.4	20.2	19.8	19.6	19.4	19.2	2
3	32.4	32.1	31.8	31.5	31.2	30.9	3	30.6	30.3	29.7	29.4	29.1	28.8	3
4	43.2	42.8	42.4	42.0	41.6	41.2	4	40.8	40.4	39.6	39.2	38.8	38.4	4
5	54.0	53.5	53.0	52.5	52.0	51.5	5	51.0	50.5	49.5	49.0	48.5	48.0	5
6	64.8	64.2	63.6	63.0	62.4	61.8	6	61.2	60.6	59.4	58.8	58.2	57.6	6
7	75.6	74.9	74.2	73.5	72.8	72.1	7	71.4	70.7	69.3	68.6	67.9	67.2	7
8	86.4	85.6	84.8	84.0	83.2	82.4	8	81.6	80.8	79.2	78.4	77.6	76.8	8
9	97.2	96.3	95.4	94.5	93.6	92.7	9	91.8	90.9	89.1	88.2	87.3	86.4	9
	95	94	93	92	91	90		89	88	87	86	85	84	
1	9.5	9.4	9.3	9.2	9.1	9.0	1	8.9	8.8	8.7	8.6	8.5	8.4	1
2	19.0	18.8	18.6	18.4	18.2	18.0	2	17.8	17.6	17.4	17.2	17.0	16.8	2
3	28.5	28.2	27.9	27.6	27.3	27.0	3	26.7	26.4	26.1	25.8	25.5	25.2	3
4	38.0	37.6	37.2	36.8	36.4	36.0	4	35.6	35.2	34.8	34.4	34.0	33.6	4
5	47.5	47.0	46.5	46.0	45.5	45.0	5	44.5	44.0	43.5	43.0	42.5	42.0	5
6	57.0	56.4	55.8	55.3	54.6	54.0	6	53.4	52.8	52.2	51.6	51.0	50.4	6
7	66.5	65.8	65.1	64.4	63.7	63.0	7	62.8	61.6	60.9	60.2	59.5	58.8	7
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9	85.5	84.6	83.7	82.8	81.9	81.0	9	80.1	79.2	78.3	77.4	76.5	75.6	9
	83	82	81	80	79	78		77	76	75	74	73	72	
1	8.3	8.2	8.1	8.0	7.9	7.8	1	7.7	7.6	7.5	7.4	7.3	7.2	1
2	16.6	16.4	16.2	16.0	15.8	15.6	2	15.4	15.2	15.0	14.8	14.6	14.4	2
3	24.9	24.6	24.3	24.0	23.7	23.4	3	23.1	22.8	22.5	22.2	21.9	21.6	3
4	33.2	32.8	32.4	32.0	31.6	31.2	4	30.8	30.4	30.0	29.6	29.2	28.8	4
5	41.5	41.0	40.5	40.0	39.5	39.0	5	38.5	38.0	37.5	37.0	36.5	36.0	5
6	49.8	49.2	48.6	48.0	47.4	46.8	6	46.2	45.6	45.0	44.4	43.8	43.2	6
7	58.1	57.4	56.7	56.0	55.3	54.6	7	53.9	53.2	52.5	51.8	51.1	50.4	7
8	66.4	65.6	64.8	64.0	63.2	62.4	8	61.6	60.8	60.0	59.2	58.4	57.6	8
9	74.7	73.8	72.9	72.0	71.1	70.2	9	69.3	68.4	67.5	66.6	65.7	64.8	9
' "	0"	1"	2"	3"	4"	5"		6"	7"	8"	9"	10"		
5 0	7.1 6270	6414	6558	6702	6845	6988		7180	7271	7418	7568	7694	50	
10	7694	7834	7973	8112	8250	8389		8526	8668	8800	8937	9073	40	
20	9073	9208	9343	9478	9612	9746		9879	10012	10145	10277	10409	30	
30	7.2 0409	0540	0671	0802	0932	1062		1191	1321	1449	1577	1705	20	
40	1705	1838	1969	2097	2224	2359		2485	2590	2715	2840	2964	10	
50	2964	3088	3212	3335	3458	3580		3708	3824	3946	4067	4188	0 54	
6 0	4188	4308	4428	4548	4668	4787		4906	5024	5142	5260	5378	50	
10	5378	5495	5612	5728	5845	5961		6076	6192	6307	6421	6536	40	
20	6536	6650	6764	6877	6991	7104		7216	7329	7441	7552	7664	30	
30	7664	7775	7886	7997	8107	8217		8327	8437	8546	8655	8764	20	
40	8764	8872	8980	9088	9196	9303		9410	9517	9624	9730	9836	10	
50	9836	9942	10047	10152	10258	10362		10467	10571	10675	10779	10882	0 53	
7 0	7.8 0882	0986	1089	1192	1294	1396		1499	1600	1702	1808	1904	50	
10	1904	2005	2106	2206	2307	2406		2506	2606	2705	2804	2908	40	
20	2908	3001	3100	3198	3296	3394		3491	3588	3685	3782	3879	30	
30	3879	3975	4071	4167	4263	4359		4454	4549	4644	4739	4838	20	
40	4838	4925	5022	5116	5209	5308		5396	5489	5582	5675	5767	10	
50	5767	5860	5952	6044	6135	6227		6318	6409	6500	6591	6682	0 52	
8 0	6682	6772	6863	6952	7042	7132		7221	7310	7400	7488	7577	50	
10	7577	7666	7754	7842	7930	8018		8106	8193	8281	8368	8455	40	
20	8455	8541	8628	8714	8801	8887		8978	9058	9144	9229	9315	30	
30	9315	9400	9485	9569	9654	9738		9823	9907	9991	10074	10158	20	
40	7.4 0158	0241	0325	0408	0491	0574		0656	0739	0821	0908	0985	10	
50	0985	1067	1149	1230	1312	1398		1474	1555	1636	1716	1797	0 51	
9 0	1797	1877	1958	2038	2117	2197		2277	2356	2436	2515	2594	50	
10	2594	2673	2751	2830	2909	2987		3065	3143	3221	3299	3376	40	
20	3376	3454	3531	3608	3686	3762		3839	3916	3992	4069	4145	30	
30	4145	4221	4297	4373	4449	4524		4600	4675	4750	4825	4900	20	
40	4900	4975	5050	5124	5199	5273		5347	5421	5495	5569	5643	10	
50	5643	5718	5790	5863	5936	6009		6082	6155	6228	6300	6373	0 50	
	10"	9"	8"	7"	6"	5"		4"	3"	2"	1"	0"	" "	

0.00	'	''	0'	1'	2'	3'	4'	5''	6''	7''	8''	9''	10''		d.	P. P.
000	10	0	7.46 873	445	517	589	661	783	805	876	948	019	090	50	72	72
000	10	10	7.47 090	162	238	308	374	445	515	586	656	726	797	40	71	1 7.2
000	20		797	867	936	006	076	*145	*215	*284	*353	*422	*491	30	69	2 14.4
000	30		7.48 491	560	629	698	766	835	908	971	009	*108	*175	20	68	3 21.6
000	40		7.49 175	243	311	379	446	513	581	648	715	782	849	10	67	4 28.0
000	50		849	916	982	*049	*115	*182	*248	*314	*380	*446	*512	0 49	66	5 36.0
000																6 43.2
000																7 50.4
000																8 57.6
000																9 64.8
000	11	0	7.50 512	578	648	709	774	840	905	970	005	100	165	50	65	70
000	10		7.51 165	230	294	359	423	488	552	616	680	744	808	40	64	1 7.0
000	20		808	872	936	999	063	*126	*190	*258	*316	*379	*442	30	68	2 14.0
000	30		7.52 442	505	568	631	693	756	818	881	945	005	067	20	62	3 21.0
000	40		7.53 067	129	191	253	315	376	438	499	561	622	683	10	62	4 28.0
000	50		683	744	805	866	927	988	*048	*109	*170	*230	*291	0 48	61	5 35.0
000																6 42.0
000																7 49.0
000																8 56.0
000																9 63.0
000	12	0	7.54 291	351	411	471	531	591	651	711	771	830	890	50	60	68
000	10		890	949	009	068	127	*186	*245	*304	*363	*422	*481	40	59	1 6.8
000	20		7.55 451	509	568	626	685	743	801	859	918	006	064	30	58	2 13.6
000	30		7.56 064	121	179	237	295	352	410	467	524	582	639	20	58	3 20.4
000	40		639	696	753	810	867	924	980	007	064	*150	*206	10	57	4 27.2
000	50		7.57 206	263	319	375	431	488	544	599	655	711	767	0 47	56	5 34.0
000																6 40.8
000																7 47.6
000																8 54.4
000																9 61.2
000	13	0	7.58 820	875	930	985	039	*094	*149	*204	*259	*314	*369	50	55	66
000	10		7.59 406	459	513	566	620	673	726	780	833	886	939	40	54	1 6.6
000	20		889	942	045	097	150	*203	*255	*308	*360	*413	*465	30	53	2 13.2
000	30		7.60 465	517	570	622	674	726	778	830	882	934	985	20	52	3 19.8
000	40															4 26.4
000	50															5 33.0
000																6 39.6
000																7 46.2
000																8 52.8
000																9 59.4
000	14	0	7.61 499	550	601	652	703	754	805	855	906	957	007	50	51	64
000	10		7.62 007	058	108	158	208	259	309	359	409	459	509	40	50	1 6.4
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000	30		496	545	594	642	691	740	788	837	885	933	982	20	49	3 19.2
000	40															4 25.6
000	50															5 32.0
000																6 38.4
000																7 44.8
000																8 51.2
000																9 57.6
000	15	0	7.64 461	509	557	604	652	*707	*754	*801	*848	*895	*942	50	48	62
000	10		7.65 406	452	499	546	592	*638	*685	*731	*778	*824	*870	40	48	1 6.2
000	20		870	916	962	009	055	*101	*146	*192	*238	*284	*330	30	46	2 12.4
000	30		7.66 330	375	421	467	512	558	603	649	694	739	784	20	45	3 18.8
000	40															4 24.8
000	50															5 31.0
000																6 37.2
000																7 43.4
000																8 49.6
000																9 55.8
000	16	0	7.67 235	279	324	369	413	*458	*502	*547	*591	*636	*680	50	44	61
000	10		7.68 121	165	208	252	296	340	383	427	470	514	557	40	44	1 6.0
000	20		657	601	644	687	731	774	817	860	903	946	989	30	43	2 12.0
000	30		7.69 082	126	169	212	255	*298	*341	*384	*427	*470	*513	20	42	3 18.0
000	40		7.70 261	302	344	386	427	*469	*510	*552	*593	*635	*676	10	41	4 24.0
000	50		7.71 083	129	170	211	251	292	333	374	414	455	496	0 42	40	5 30.0
000			496	536	577	617	658	698	739	779	819	859	900			6 36.0
000																7 42.0
000																8 48.0
000																9 54.0
000	17	0	7.72 300	340	380	419	459	*500	*540	*580	*620	*660	*700	50	40	60
000	10		7.73 090	129	168	207	246	285	324	363	401	440	479	40	39	1 5.8
000	20		697	736	775	815	854	894	933	972	011	050	090	30	38	2 11.6
000	30		7.74 248	286	324	362	400	438	476	514	551	589	627	20	37	3 17.6
000	40		827	865	903	941	978	1015	1053	1091	1129	1167	1205	10	36	4 23.6
000	50		7.75 003	040	077	115	153	190	227	264	302	339	376	0 41	35	5 29.6
000			376	413	450	487	524	561	598	635	672	709	745			6 35.6
000			745	782	819	856	892	929	966	002	039	075	*112			7 41.6
000			7.76 112	148	185	221	258	294	330	367	403	439	475	0 40	34	8 47.6
0.99			10''	9''	8''	7''	6''	5''	4''	3''	2''	1''	0''		d.	P. P.

	0''	1''	2''	3''	4''	5''	6''	7''	8''	9''	10''		d.	P. P.
10 0	7.46 878	445	517	589	661	738	805	876	948	019	091	50	72	59 58 57
10 10	7.47 091	162	238	304	374	445	516	586	656	727	797	40	70	1 59 58 57
20	797 867	987	006	076	146	215	284	354	425	492	560	70	71	2 11 18 11 14
30	7.48 492	561	629	698	767	835	908	972	040	108	176	20	68	3 17 7 17 17 1
40	7.49 176	248	311	379	446	514	581	648	715	782	849	10	67	4 23 6 23 22 8
50	849 916	982	049	115	182	248	314	380	446	512	0 49	66	66	5 29 5 29 20 5
11 0	7.50 512	578	648	709	774	840	905	970	035	100	165	50	65	6 35 4 34 8 32
10 10	7.51 165	230	295	359	424	488	552	617	681	745	809	40	64	7 41 8 40 6 39 9
20	809 872	936	000	063	127	190	258	316	380	443	507	30	68	8 47 2 46 4 45 6
30	7.52 448	505	568	631	694	756	819	881	945	005	067	20	62	9 53 1 52 5 54
40	7.53 067	129	191	258	315	377	438	500	561	622	683	10	62	1 56 5 5 5 4
50	638 745	806	867	927	988	049	110	170	231	291	0 48	61	61	2 11 2 11 0 10 8
12 0	7.54 291	351	411	471	532	591	651	711	771	830	890	50	60	3 16 8 3 16 5 16 6
10 10	890 949	009	068	127	186	245	304	363	422	481	540	40	59	4 22 4 22 0 21 6
20	7.55 451	509	568	627	687	748	808	868	928	988	048	30	58	5 28 0 27 5 27 0
30	7.56 064	122	179	237	295	352	410	467	525	582	639	20	58	6 33 6 33 0 30 6
40	699 696	753	810	867	924	981	037	094	150	207	264	10	57	7 37 1 36 4 35 7
50	7.57 207	263	319	376	432	488	544	600	656	711	767	0 47	56	8 42 4 41 6 40 8
13 0	767 828	878	934	989	045	100	155	210	265	320	375	50	55	9 47 7 46 8 45 9
10 10	7.58 820	875	930	985	040	594	649	704	758	812	867	40	55	1 53 5 2 5 1
20	867 921	975	029	083	137	191	245	299	353	406	460	30	54	2 10 6 2 10 4 10 2
30	7.59 406	460	518	567	620	673	727	780	833	886	939	20	58	3 15 9 3 15 6 15 3
40	939 992	045	098	150	203	256	308	361	413	466	519	10	58	4 21 2 4 21 0 20 8
50	7.60 466	518	570	622	674	726	778	830	882	934	986	0 46	52	5 26 5 26 0 25 5
14 0	986 087	089	140	192	243	295	346	397	449	500	550	50	51	6 31 8 6 31 0 6 30 6
10 10	7.61 500	551	602	653	704	754	805	856	906	957	008	40	51	7 37 1 36 4 35 7
20	7.62 008	058	108	159	209	259	310	360	410	460	510	30	50	8 42 4 41 6 40 8
30	510 560	609	659	709	759	808	858	907	957	006	550	20	50	9 47 7 46 8 45 9
40	7.63 008	055	105	154	203	252	301	350	399	448	497	10	49	1 50 4 9 4 8
50	497 548	594	643	692	740	789	837	885	934	982	0 45	48	48	2 10 0 2 9 8 9 6
15 0	962 080	078	127	175	223	271	318	366	414	462	510	50	48	3 15 0 3 15 0 3 14 0
10 10	7.64 462	510	557	605	652	700	747	795	842	889	937	40	48	4 20 0 4 20 0 4 19 0
20	927 984	081	078	125	172	219	266	313	359	406	453	30	47	5 25 0 5 25 0 5 24 0
30	7.65 408	455	502	549	592	639	685	732	778	824	871	20	46	6 30 0 6 30 0 6 29 0
40	871 917	963	009	055	101	147	193	239	284	330	375	10	46	7 35 0 7 35 0 7 34 0
50	7.66 380	376	421	467	513	558	604	649	694	740	785	0 44	46	8 40 0 8 40 0 8 39 0
16 0	785 830	875	920	966	011	056	100	145	190	235	280	50	45	9 45 0 9 45 0 9 44 0
10 10	7.67 235	280	324	369	414	458	503	547	592	636	680	40	44	1 44 4 4 4 2
20	680 720	769	818	867	901	946	990	034	077	121	165	30	44	2 9 4 2 9 2 9 0
30	7.68 121	165	209	253	296	340	384	427	471	514	558	20	44	3 14 1 3 14 0 3 13 0
40	558 601	645	688	731	774	818	861	904	947	990	10	43	43	4 16 8 4 16 8 4 16 0
50	990 038	076	119	162	204	247	290	333	375	418	0 43	43	43	5 23 5 23 0 22 5
17 0	7.69 418	460	508	545	588	630	673	715	757	799	842	50	42	6 28 4 6 28 4 6 27 4
10 10	842 884	926	968	010	052	094	136	178	219	261	303	40	42	7 30 8 7 30 8 7 29 8
20	7.70 261	308	345	386	428	469	511	553	594	635	677	30	42	8 35 2 8 35 2 8 34 2
30	677 718	759	801	842	883	924	965	006	047	088	129	20	41	9 39 6 9 39 6 9 38 6
40	7.71 088	129	170	211	252	293	334	374	415	456	496	10	41	1 41 4 40 3 39
50	496 537	577	618	658	699	739	779	820	860	900	0 42	40	40	2 12 2 12 0 11 7
18 0	900 940	981	021	061	101	141	181	221	261	301	341	50	40	3 13 2 3 13 0 3 12 0
10 10	7.72 301	340	380	420	460	499	539	579	618	658	697	40	40	4 16 4 4 16 0 4 15 0
20	697 737	776	815	855	894	933	973	012	051	090	129	30	39	5 20 5 20 0 19 5
30	7.73 090	129	168	207	246	285	324	363	402	441	480	20	39	6 24 6 24 0 23 4
40	480 518	557	596	635	673	712	750	789	827	866	905	10	39	7 28 7 28 0 27 3
50	866 904	943	981	019	058	096	134	172	210	248	0 41	38	38	8 32 8 32 0 8 1 2
19 0	7.74 248	286	325	363	401	439	476	514	552	590	628	50	38	9 36 9 36 0 9 35 0
10 10	628 665	703	741	779	816	854	891	929	966	004	042	40	38	1 3 8 3 7 8 6
20	7.75 004	041	079	116	153	191	228	265	302	339	377	30	37	2 7 8 2 7 8 0 7 7 8
30	877 914	951	988	025	562	599	636	672	709	746	783	20	37	3 11 4 3 11 4 3 10 8
40	746 788	820	856	893	930	966	002	040	076	113	150	10	37	4 15 2 4 15 2 4 14 4
50	7.76 118	149	186	222	258	295	331	367	404	440	476	0 40	36	5 19 0 5 19 0 5 18 0
	10''	9''	8''	7''	6''	5''	4''	3''	2''	1''	0''		d.	P. P.

9.99	' "	0"	1"	2"	3"	4"	5"	6"	7"	8"	9"	10"		d.
999	20 0	7.76 475	512	548	584	620	656	692	728	764	800	836	50	36
999	10	586	372	907	943	979	*015	*051	*086	*122	*158	*193	40	36
999	20	7.77 193	229	264	300	335	371	406	442	477	512	548	30	36
999	30	548	583	618	654	689	724	759	794	829	864	899	20	35
999	40	809	934	969	*004	*039	*074	*109	*144	*179	*213	*248	10	35
999	50	7.78 248	283	318	352	387	422	456	491	525	560	594	0 39	35
999	21 0	594	629	663	698	732	766	801	835	869	903	938	50	34
999	10	988	972	*006	*040	*074	*108	*142	*176	*210	*244	*278	40	34
999	20	7.79 273	312	346	380	414	448	481	515	549	582	616	30	34
999	30	616	650	683	717	751	784	818	851	885	918	952	20	34
999	40	952	985	*018	*052	*085	*118	*152	*185	*218	*251	*284	10	33
999	50	7.80 284	317	351	384	417	450	483	516	549	582	615	0 38	33
999	22 0	615	647	680	713	746	779	812	844	877	910	942	50	33
999	10	942	975	*008	*040	*073	*105	*138	*170	*203	*235	*268	40	33
999	20	7.81 268	300	332	365	397	429	462	494	526	558	591	30	32
999	30	591	623	655	687	719	751	783	815	847	879	911	20	32
999	40	911	943	975	*007	*039	*070	*102	*134	*166	*198	*229	10	32
999	50	7.82 229	261	293	324	356	387	419	451	482	514	545	0 37	32
999	23 0	545	577	608	639	671	702	733	765	796	827	859	50	31
999	10	859	890	921	952	983	*015	*046	*077	*108	*139	*170	40	31
999	20	7.83 170	201	232	263	294	325	356	387	417	448	479	30	31
999	30	479	510	541	571	602	633	663	694	725	755	786	20	31
999	40	786	817	847	878	908	939	969	*008	*038	*068	*091	10	30
999	50	7.84 091	121	151	182	212	242	273	303	333	363	393	0 30	30
999	24 0	393	424	454	484	514	544	574	604	634	664	694	50	30
999	10	694	724	754	784	814	843	873	903	933	963	992	40	30
999	20	992	*022	*052	*082	*111	*141	*171	*200	*230	*259	*289	30	30
999	30	7.85 289	318	348	377	407	436	466	495	525	554	583	20	29
999	40	583	613	642	671	701	730	759	788	817	847	876	10	29
999	50	876	905	934	963	992	*021	*050	*079	*108	*137	*166	0 35	29
999	25 0	7.86 166	195	224	253	282	311	340	368	397	426	455	50	29
999	10	455	484	512	541	570	598	627	656	684	713	741	40	29
999	20	741	770	799	827	856	884	913	941	969	998	*026	30	28
999	30	7.87 026	055	083	111	140	168	196	224	252	281	309	20	28
999	40	309	337	366	394	423	450	478	506	534	562	590	10	28
999	50	590	618	646	674	702	730	758	786	814	842	870	0 34	28
999	26 0	870	897	925	953	981	*009	*036	*064	*092	*119	*147	50	28
999	10	7.88 147	175	202	230	258	285	313	340	368	395	423	40	28
999	20	423	450	478	505	533	560	587	615	642	669	697	30	27
999	30	697	724	751	779	806	833	860	888	915	942	969	20	27
999	40	969	996	*023	*050	*077	*105	*132	*159	*186	*213	*240	10	27
999	50	7.89 240	267	294	320	347	374	401	428	455	482	509	0 33	27
999	27 0	509	535	562	589	616	642	669	696	722	749	776	50	27
999	10	776	802	829	856	882	909	935	962	988	*015	*041	40	26
999	20	7.90 041	068	094	121	147	174	200	226	252	279	305	30	26
999	30	305	332	358	384	411	437	463	489	515	542	568	20	26
999	40	568	594	620	646	672	698	725	751	777	803	829	10	26
999	50	829	855	881	907	933	958	984	*010	*036	*062	*088	0 32	26
999	28 0	7.91 088	114	140	165	191	217	243	269	294	320	346	50	26
999	10	346	371	397	423	448	474	500	525	551	576	602	40	26
999	20	602	627	653	678	704	729	755	780	806	831	857	30	26
999	30	857	882	907	933	958	983	*009	*034	*059	*085	*110	20	25
999	40	7.92 110	135	160	186	211	236	261	286	311	336	362	10	25
999	50	362	387	412	437	462	487	512	537	562	587	612	0 31	25
999	29 0	612	637	662	687	712	737	761	786	811	836	861	50	25
999	10	861	886	910	935	960	985	*009	*034	*059	*084	*108	40	25
999	20	7.98 103	133	158	182	207	231	256	281	305	330	354	30	25
999	30	354	379	403	428	452	477	501	526	550	575	599	20	24
999	40	599	623	648	672	696	721	745	769	794	818	842	10	24
999	50	842	866	891	915	939	963	988	*012	*036	*060	*084	0 30	24
9.99		10"	9"	8"	7"	6"	5"	4"	3"	2"	1"	0"	" "	d.

L. Tang.

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'	''	0''	1''	2''	3''	4''	5''	6''	7''	8''	9''	10''		d.	P. P.	
20	0	7.76	476	512	548	585	621	657	698	729	765	801	887	50	36	
10		887	872	908	944	980	016	051	087	128	158	194	40	36	37 36	
20		7.77	194	230	265	301	336	372	407	442	478	518	549	30	36	1 3.7 3.6
30		549	584	619	654	690	725	760	795	830	865	900	20	35	2 7.4 7.2	
40		900	985	970	005	040	075	110	145	179	214	249	10	35	3 11.1 10.8	
50		7.78	249	284	318	358	388	422	457	492	526	561	595	0 39	35	4 14.8 14.4
21	0	595	680	664	698	738	767	801	836	870	904	988	50	34	5 18.5 18.0	
10		988	978	007	041	075	109	143	177	211	245	279	40	34	6 22.2 21.6	
20		7.79	279	318	347	381	415	448	482	516	550	588	617	30	34	7 25.9 25.2
30		617	651	684	718	751	785	819	852	886	919	952	20	34	8 28.6 28.4	
40		952	986	019	058	096	119	152	186	219	252	285	10	33	9 33.5 33.4	
50		7.80	285	318	351	385	418	451	484	517	550	588	615	0 38	33	1 3.5 3.4
22	0	615	648	681	714	747	780	812	845	878	911	943	50	33	2 7.0 6.8	
10		943	976	009	041	074	106	139	171	204	236	269	40	33	3 10.5 10.2	
20		7.81	269	301	333	366	398	430	468	495	527	559	591	30	32	4 14.0 13.6
30		591	624	656	688	720	752	784	816	848	880	912	20	32	5 17.5 17.0	
40		912	944	976	008	040	071	108	135	167	198	230	10	32	6 21.0 20.4	
50		7.82	230	262	294	325	357	388	420	452	488	515	546	0 37	32	7 24.5 23.8
23	0	546	578	609	640	672	708	734	766	797	828	860	50	31	8 28.0 27.2	
10		860	891	922	958	984	016	047	078	109	140	171	40	31	9 31.5 30.6	
20		7.88	171	202	233	264	295	326	357	388	418	449	480	30	31	1 3.8 3.2
30		480	511	542	572	603	634	664	695	726	756	787	20	31	2 6.6 6.4	
40		787	818	848	879	909	940	970	001	031	061	092	10	30	3 9.9 9.6	
50		7.84	092	122	152	183	213	243	274	304	334	364	394	0 36	30	4 12.4 12.0
24	0	894	425	455	485	515	545	575	605	635	665	695	50	30	5 15.5 15.0	
10		695	725	755	785	815	845	874	904	934	964	994	40	30	6 18.6 18.0	
20		998	028	058	088	112	142	172	201	231	260	290	30	30	7 21.7 21.0	
30		7.85	290	319	349	378	408	437	467	496	526	555	584	20	29	8 24.8 24.0
40		584	614	643	672	702	731	760	789	819	848	877	10	29	9 27.9 27.0	
50		877	906	935	964	998	022	051	080	109	138	167	0 35	29	29 28	
25	0	7.86	167	196	225	254	288	312	341	370	398	427	456	50	29	1 2.9 2.8
10		456	485	513	542	571	600	628	657	685	714	743	40	29	2 5.8 5.6	
20		743	771	800	828	857	885	914	942	971	999	027	30	28	3 8.7 8.4	
30		7.87	027	056	084	113	141	169	197	226	254	282	310	20	28	4 11.6 11.2
40		810	839	867	895	923	951	979	507	535	568	591	10	28	5 14.5 14.0	
50		591	619	647	675	708	731	759	787	815	848	871	0 34	28	6 17.4 16.8	
26	0	871	899	926	954	982	010	037	065	093	121	148	50	28	7 20.3 19.6	
10		7.88	148	176	204	231	259	286	314	342	369	397	424	40	28	8 23.2 22.4
20		424	452	479	506	534	561	589	616	648	671	698	80	27	9 26.1 25.2	
30		698	725	753	780	807	834	862	889	916	948	970	20	27	1 2.7 2.6	
40		970	997	025	052	079	106	133	160	187	214	241	10	27	2 5.4 5.2	
50		7.89	241	268	295	322	349	376	403	429	456	488	510	0 33	27	3 8.1 7.8
27	0	510	537	563	590	617	644	670	697	724	750	777	50	27	4 10.8 10.4	
10		777	804	830	857	884	910	937	963	990	016	043	40	27	5 13.5 13.0	
20		7.90	043	069	096	122	149	175	201	228	254	280	307	30	26	6 16.2 15.6
30		307	338	359	386	412	438	464	491	517	543	569	20	26	7 19.8 19.2	
40		569	595	622	648	674	700	726	752	778	804	830	10	26	8 22.5 21.6	
50		880	856	882	908	934	960	986	012	038	064	089	0 32	26	9 24.3 23.4	
28	0	7.91	089	115	141	167	193	218	244	270	296	321	347	50	26	25 24
10		347	373	399	424	450	475	501	527	552	578	608	40	26	1 2.5 2.4	
20		608	629	654	680	705	731	756	782	807	838	868	30	26	2 5.0 4.8	
30		858	888	909	934	960	985	010	036	061	086	111	20	25	3 7.5 7.2	
40		7.92	111	137	162	187	212	237	263	288	313	338	363	10	25	4 10.0 9.6
50		363	388	413	438	468	488	518	538	568	588	618	0 31	25	5 12.5 12.0	
29	0	618	625	668	688	718	738	768	788	818	838	862	50	25	6 15.0 14.4	
10		862	887	912	937	961	986	011	036	060	085	110	40	25	7 17.5 16.8	
20		7.98	110	134	159	184	208	233	258	282	307	331	356	30	25	8 20.0 19.2
30		356	380	405	429	454	478	503	527	552	576	601	20	24	9 22.5 21.6	
40		601	625	649	674	698	722	747	771	795	820	844	10	24		
50		844	868	892	917	941	965	989	013	038	062	086	0 30	24		
		10''	9''	8''	7''	6''	5''	4''	3''	2''	1''	0''	'	d.	P. P.	

9.99	'	''	0"	1"	2"	3"	4"	5"	6"	7"	8"	9"	10"		d.
998	30	0	7.94 064	108	182	157	181	205	229	258	277	801	825	50	24
998	10		825	849	878	897	421	445	469	492	516	540	564	40	24
998	20		564	588	612	636	659	683	707	731	755	778	802	30	24
998	30		802	826	849	873	897	921	944	968	991	*015	*039	20	24
998	40		7.95 089	062	066	109	188	157	180	204	227	251	274	10	24
998	50		274	298	321	344	368	391	415	438	461	485	508	0 29	28
998	31	0	508	532	555	578	601	625	648	671	695	718	741	50	28
998	10		741	764	787	811	834	857	880	903	926	950	973	40	28
998	20		973	996	*019	*042	*065	*088	*111	*134	*157	*180	*203	30	28
998	30		7.96 208	226	249	272	295	318	341	364	386	409	432	20	28
998	40		432	455	478	501	524	546	569	592	615	637	660	10	28
998	50		660	683	706	728	751	774	796	819	842	864	887	0 28	28
998	32	0	887	910	932	955	977	*000	*022	*045	*068	*090	*118	50	28
998	10		7.97 118	135	158	180	202	225	247	270	292	315	337	40	22
998	20		337	359	382	404	426	449	471	493	515	538	560	30	22
998	30		560	582	605	627	649	672	694	716	738	760	782	20	22
998	40		782	805	827	849	871	893	915	937	959	981	*008	10	22
998	50		7.98 008	025	048	070	092	114	136	157	179	201	223	0 27	22
998	33	0	223	245	267	289	311	333	355	377	398	420	442	50	22
998	10		442	464	486	508	529	551	573	595	616	638	660	40	22
998	20		660	682	703	725	747	768	790	812	833	855	876	30	22
998	30		876	898	920	941	963	984	*006	*027	*049	*070	*092	20	22
998	40		7.99 092	118	135	156	178	199	221	242	264	285	306	10	21
998	50		306	328	349	371	392	413	435	456	477	499	520	0 26	21
998	34	0	520	541	562	584	605	626	647	669	690	711	732	50	21
998	10		732	753	775	796	817	838	859	880	901	922	943	40	21
998	20		943	965	986	*007	*028	*049	*070	*091	*112	*133	*154	30	21
998	30		8.00 154	175	196	217	238	259	279	300	321	342	363	20	21
998	40		363	384	405	426	447	467	488	509	530	551	571	10	21
998	50		571	592	613	634	654	675	696	717	737	758	779	0 25	21
998	35	0	779	799	820	841	861	882	902	923	944	964	985	50	21
998	10		985	*006	*026	*047	*067	*088	*108	*129	*149	*170	*190	40	20
998	20		8.01 190	211	231	252	272	293	313	333	354	374	395	30	20
998	30		395	415	435	456	476	496	517	537	557	578	598	20	20
998	40		598	618	639	659	679	699	720	740	760	780	801	10	20
998	50		801	821	841	861	881	901	922	942	962	982	*002	0 24	20
998	36	0	8.02 002	022	042	062	082	102	123	143	163	183	203	50	20
998	10		203	223	243	263	283	303	323	343	363	383	403	40	20
998	20		403	422	442	462	482	502	522	542	561	581	601	30	20
998	30		601	621	641	661	680	700	720	740	759	779	799	20	20
998	40		799	819	838	858	878	898	917	937	957	976	996	10	20
998	50		996	*016	*035	*055	*074	*094	*114	*133	*153	*172	*192	0 23	20
997	37	0	8.03 192	212	231	251	270	290	309	329	348	368	387	50	20
997	10		387	407	426	446	465	484	504	523	543	562	581	40	19
997	20		581	601	620	640	659	678	698	717	736	756	775	30	19
997	30		775	794	813	833	852	871	891	910	929	948	967	20	19
997	40		967	987	*006	*025	*044	*063	*083	*102	*121	*140	*159	10	19
997	50		8.04 159	179	197	217	236	255	274	293	312	331	350	0 22	19
997	38	0	350	369	388	407	426	445	464	483	502	521	540	50	19
997	10		540	559	578	597	616	635	654	673	692	710	729	40	19
997	20		729	748	767	786	805	824	843	861	880	899	918	30	19
997	30		918	937	955	974	993	*012	*030	*049	*068	*087	*105	20	19
997	40		8.05 105	124	143	161	180	199	218	236	255	274	292	10	19
997	50		292	311	329	348	367	385	404	422	441	460	478	0 21	19
997	39	0	478	497	515	534	552	571	589	608	626	645	663	50	18
997	10		663	682	700	719	737	756	774	792	811	829	848	40	18
997	20		848	866	885	903	921	940	958	976	995	*018	*031	30	18
997	30		8.06 081	050	068	086	105	123	141	159	178	196	214	20	18
997	40		214	232	251	269	287	305	324	342	360	378	396	10	18
997	50		396	414	433	451	469	487	505	523	541	560	578	0 20	18
9.99			10"	9"	8"	7"	6"	5"	4"	3"	2"	1"	0"	"	d.

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	0''	1''	2''	3''	4''	5''	6''	7''	8''	9''	10''		d.	P. P.
<b>30</b> 0	7.94 086	110	184	158	182	206	230	254	278	302	326	50	24	25
10	826	850	874	898	422	446	470	494	518	542	566	40	24	2 5
20	566	590	618	687	661	685	709	732	756	780	804	30	24	2 5.0
30	804	827	851	875	899	922	946	970	993	017	040	20	24	3 7.5
40	7.95 040	064	058	111	185	158	182	205	229	252	276	10	24	4 10.0
50	276	299	323	346	370	393	416	440	463	487	510	0 29	23	6 12.5
<b>31</b> 0	510	533	557	580	603	627	650	673	696	720	743	50	23	6 15.0
10	743	766	789	812	836	859	882	905	928	951	974	40	23	7 17.5
20	974	998	021	044	067	090	113	136	159	182	205	30	23	8 20.0
30	7.96 205	228	251	274	297	320	343	365	388	411	434	20	23	9 22.5
40	434	457	480	503	525	548	571	594	617	639	662	10	23	24
50	662	685	708	730	753	776	798	821	844	866	889	0 28	23	23
<b>32</b> 0	889	911	934	957	979	002	024	047	069	092	114	50	22	1 2.4
10	7.97 114	137	159	182	204	227	249	272	294	317	339	40	22	2 4.8
20	339	361	384	406	428	451	473	495	518	540	562	30	22	3 7.2
30	562	585	607	629	651	673	696	718	740	762	784	20	22	4 9.6
40	784	807	829	851	873	895	917	939	961	983	005	10	22	5 12.0
50	7.98 005	027	050	072	094	116	138	159	181	203	225	0 27	22	6 14.4
<b>33</b> 0	225	247	269	291	313	335	357	379	400	422	444	50	22	7 16.8
10	444	466	488	510	531	553	575	597	618	640	662	40	22	8 19.2
20	662	684	705	727	749	770	792	814	835	857	878	30	22	9 21.6
30	878	900	922	943	965	986	008	029	051	073	094	20	22	22
40	7.99 094	116	137	158	180	201	223	244	266	287	308	10	21	1 2.2
50	308	330	351	373	394	415	437	458	479	501	522	0 26	21	2 4.4
<b>34</b> 0	522	543	564	586	607	628	649	671	692	713	734	50	21	3 6.6
10	734	755	777	798	819	840	861	882	903	925	946	40	21	4 8.8
20	946	967	988	009	030	051	072	093	114	135	156	30	21	5 11.0
30	8.00 156	177	198	219	240	261	282	303	324	344	365	20	21	6 13.2
40	365	386	407	428	449	470	490	511	532	553	574	10	21	7 15.4
50	574	594	615	636	657	677	698	719	740	760	781	0 25	21	8 17.6
<b>35</b> 0	781	802	822	843	864	884	905	925	946	967	987	50	21	9 19.8
10	987	008	028	049	070	090	111	131	152	172	193	40	21	21
20	8.01 193	213	234	254	274	295	315	336	356	377	397	30	20	1 2.1
30	397	417	438	458	478	499	519	539	560	580	600	20	20	2 4.2
40	600	621	641	661	682	702	722	742	762	783	803	10	20	3 6.3
50	803	823	843	863	884	904	924	944	964	984	004	0 24	20	4 8.4
<b>36</b> 0	8.02 004	025	045	065	085	105	125	145	165	185	205	50	20	5 10.5
10	205	225	245	265	285	305	325	345	365	385	405	40	20	6 12.6
20	405	425	445	464	484	504	524	544	564	584	604	30	20	7 14.7
30	604	623	643	663	683	703	722	742	762	782	801	20	20	8 16.8
40	801	821	841	861	881	900	920	939	959	979	998	10	20	9 18.9
50	998	018	038	057	077	097	116	136	155	175	194	0 23	20	20
<b>37</b> 0	8.08 194	214	234	253	273	292	312	331	351	370	390	50	20	19
10	390	409	429	448	468	487	506	526	545	565	584	40	19	1 2.0
20	584	603	623	642	661	681	700	720	739	758	777	30	19	2 4.0
30	777	797	816	835	855	874	893	912	932	951	970	20	19	3 6.0
40	970	989	008	028	047	066	085	104	124	143	162	10	19	4 8.0
50	8.04 162	181	200	219	238	257	276	296	315	334	353	0 22	19	5 10.0
<b>38</b> 0	353	372	391	410	429	448	467	486	505	524	543	50	19	6 12.0
10	543	562	581	600	619	638	656	675	694	713	732	40	19	7 14.0
20	732	751	770	789	808	826	845	864	883	902	921	30	19	8 16.0
30	921	939	958	977	996	014	033	052	071	089	108	20	19	9 18.0
40	8.05 108	127	146	164	183	202	220	239	258	276	295	10	19	1 1.8
50	295	314	333	351	369	388	407	425	444	462	481	0 21	19	2 3.6
<b>39</b> 0	481	499	518	537	555	574	592	611	629	648	666	50	18	3 5.4
10	666	685	703	722	740	758	777	795	814	832	851	40	18	4 7.2
20	851	869	887	906	924	943	961	979	998	016	034	30	18	5 9.0
30	8.06 034	053	071	089	107	126	144	162	181	199	217	20	18	6 10.8
40	217	235	254	272	290	308	326	345	363	381	399	10	18	7 12.6
50	399	417	436	454	472	490	508	526	544	562	581	0 20	18	8 14.4
	10''	9''	8''	7''	6''	5''	4''	3''	2''	1''	0''		d.	P. P.

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9.99	'	''	0"	1"	2"	3"	4"	5"	6"	7"	8"	9"	10"		d.	
997	40	0	8.06	578	596	614	632	650	668	686	704	722	740	758	50	18
997	10			758	776	794	812	830	848	866	884	902	920	938	40	18
997	20			988	956	974	992	*010	*028	*046	*068	*081	*099	*117	30	18
997	30		8.07	117	135	158	171	139	206	224	242	260	278	295	20	18
997	40			295	313	331	349	367	384	402	420	438	455	473	10	18
997	50			473	491	509	526	544	562	579	597	615	632	650	0 19	18
997	41	0		650	668	685	703	721	738	756	773	791	809	826	50	18
997	10			826	844	861	879	896	914	932	949	967	984	*002	40	18
997	20		8.08	002	019	037	054	072	089	107	124	141	159	176	30	17
997	30			176	194	211	229	246	263	281	298	316	333	350	20	17
997	40			350	368	385	403	420	437	455	472	489	506	524	10	17
997	50			524	541	558	576	593	610	627	645	662	679	696	0 18	17
997	42	0		606	714	731	748	765	783	800	817	834	851	868	50	17
997	10			868	886	903	920	937	954	971	988	*006	*023	*040	40	17
997	20		8.09	040	057	074	091	108	125	142	159	176	193	210	30	17
997	30			210	227	244	261	278	295	312	329	346	363	380	20	17
997	40			380	397	414	431	448	465	482	499	516	533	550	10	17
997	50			550	567	583	600	617	634	651	668	685	701	718	0 17	17
997	43	0		718	735	752	769	786	802	819	836	853	870	886	50	17
997	10			886	903	920	937	953	970	987	*004	*020	*037	*054	40	17
997	20		8.10	054	070	087	104	120	137	154	170	187	204	220	30	17
997	30			220	237	254	270	287	303	320	337	353	370	386	20	17
996	40			386	403	420	436	453	469	486	502	519	535	552	10	17
996	50			552	568	585	601	618	634	651	667	684	700	717	0 16	16
996	44	0		717	733	750	766	782	799	815	832	848	864	881	50	16
996	10			881	897	914	930	946	963	979	995	*012	*028	*044	40	16
996	20		8.11	044	061	077	093	110	126	142	158	175	191	207	30	16
996	30			207	224	240	256	272	289	305	321	337	354	370	20	16
996	40			370	386	402	418	435	451	467	483	499	515	531	10	16
996	50			531	548	564	580	596	612	628	644	660	677	693	0 15	16
996	45	0		693	709	725	741	757	773	789	805	821	837	853	50	16
996	10			853	869	885	901	917	933	949	965	981	997	*018	40	16
996	20		8.12	018	029	045	061	077	093	109	125	141	157	172	30	16
996	30			173	188	204	220	236	252	268	284	300	315	331	20	16
996	40			331	347	363	379	395	410	426	442	458	474	489	10	16
996	50			489	505	521	537	553	568	584	600	616	632	647	0 14	16
996	46	0		647	663	679	694	710	726	741	757	773	788	804	50	16
996	10			804	820	836	851	867	882	898	914	929	945	961	40	16
996	20			961	976	992	*007	*023	*039	*054	*070	*085	*101	*117	30	16
996	30		8.13	117	132	148	163	179	194	210	225	241	256	272	20	16
996	40			272	287	303	318	334	349	365	380	396	411	427	10	16
996	50			427	442	458	473	489	504	519	535	550	566	581	0 13	16
996	47	0		581	596	612	627	643	658	673	689	704	719	735	50	15
996	10			735	750	765	781	796	811	827	842	857	873	888	40	15
996	20			888	903	919	934	949	964	980	995	*010	*025	*041	30	15
996	30		8.14	041	056	071	086	101	117	132	147	162	178	193	20	15
996	40			193	208	223	238	253	269	284	299	314	329	344	10	15
996	50			344	359	375	390	405	420	435	450	465	480	495	0 12	15
996	48	0		495	510	525	541	556	571	586	601	616	631	646	50	15
996	10			646	661	676	691	706	721	736	751	766	781	796	40	15
996	20			796	811	826	841	856	871	886	901	915	930	945	30	15
996	30			945	960	975	990	*005	*020	*035	*050	*065	*079	*094	20	15
996	40		8.15	094	109	124	139	154	169	183	198	213	228	243	10	15
996	50			243	258	272	287	302	317	332	346	361	376	391	0 11	15
996	49	0		391	406	420	435	450	465	479	494	509	523	538	50	15
996	10			538	553	568	582	597	612	626	641	656	670	685	40	15
996	20			685	700	714	729	744	758	773	788	802	817	832	30	15
996	30			832	846	861	875	890	905	919	934	948	963	978	20	15
995	40			978	992	*007	*021	*036	*050	*065	*079	*094	*109	*123	10	14
995	50		8.16	123	138	152	167	181	196	210	225	239	254	268	0 10	14
9.99			10"	9"	8"	7"	6"	5"	4"	3"	2"	1"	0"	"	'	d.



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' "	0''	1''	2''	3''	4''	5''	6''	7''	8''	9''	10''		d.	P. P.	
40 0	8.06	581	599	617	635	653	671	689	707	725	743	761	50	18	
10		761	779	797	815	833	851	869	887	905	923	941	40	18	
20		941	959	977	995	1013	1031	1049	1066	1084	1102	1120	30	18	18
30	8.07	120	138	156	174	192	209	227	245	263	281	298	20	18	1
40		298	316	334	352	370	387	405	423	441	458	476	10	18	1.8
50		476	494	512	529	547	565	582	600	618	635	653	0 19	18	2, 3, 6
41 0		653	671	688	706	724	741	759	776	794	812	829	50	18	8 5, 4
10		829	847	864	882	900	917	935	952	970	987	1005	40	18	4 7, 2
20	8.08	005	022	040	057	075	092	110	127	145	162	180	30	18	5 9, 0
30		180	197	214	232	249	267	284	301	319	336	354	20	17	6 10, 8
40		354	371	388	406	423	440	458	475	492	510	527	10	17	7 12, 6
50		527	544	562	579	596	613	631	648	665	682	700	0 18	17	8 14, 4
42 0		700	717	734	751	769	786	803	820	837	855	872	50	17	9 16, 2
10		872	889	906	923	940	957	975	992	1009	1026	1043	40	17	
20	8.09	043	060	077	094	111	128	146	163	180	197	214	30	17	17
30		214	231	248	265	282	299	316	333	350	367	384	20	17	1 1, 7
40		384	401	418	435	452	468	485	502	519	536	553	10	17	2 8, 4
50		553	570	587	604	621	637	654	671	688	705	722	0 17	17	3 5, 1
43 0		722	739	755	772	789	806	823	839	856	873	890	50	17	4 6, 8
10		890	907	923	940	957	974	990	1007	1024	1040	1057	40	17	5 8, 5
20	8.10	057	074	091	107	124	141	157	174	191	207	224	30	17	6 10, 2
30		224	240	257	274	290	307	324	340	357	373	390	20	17	7 11, 9
40		390	407	423	440	456	473	489	506	522	539	555	10	16	8 13, 6
50		555	572	588	605	621	638	654	671	687	704	720	0 16	16	9 15, 8
44 0		720	737	753	770	786	802	819	835	852	868	884	50	16	
10		884	901	917	934	950	966	983	999	1015	1032	1048	40	16	16
20	8.11	043	064	081	097	113	130	146	162	178	195	211	30	16	1 1, 6
30		211	227	244	260	276	292	309	325	341	357	373	20	16	2 3, 2
40		373	389	406	422	438	454	471	487	503	519	535	10	16	3 4, 8
50		535	551	567	584	600	616	632	648	664	680	696	0 15	16	4 6, 4
45 0		696	712	729	745	761	777	793	809	825	841	857	50	16	5 8, 0
10		857	873	889	905	921	937	953	969	985	1001	1017	40	16	6 9, 6
20	8.12	017	033	049	065	081	097	113	129	144	160	176	30	16	7 11, 2
30		176	192	208	224	240	256	272	288	303	319	335	20	16	8 12, 8
40		335	351	367	383	398	414	430	446	462	478	493	10	16	9 14, 4
50		493	509	525	541	556	572	588	604	620	635	651	0 14	16	
46 0		651	667	682	698	714	730	745	761	777	792	808	50	16	16
10		808	824	839	855	871	886	902	918	933	949	965	40	16	
20		965	980	996	1011	1027	1043	1058	1074	1089	1105	1121	30	16	1 1, 5
30	8.13	121	136	152	167	183	198	214	229	245	260	276	20	16	2 3, 0
40		276	291	307	322	338	353	369	384	400	415	431	10	16	3 4, 5
50		431	446	462	477	493	508	523	539	554	570	585	0 13	15	4 6, 0
47 0		585	601	616	631	647	662	677	693	708	724	739	50	15	5 7, 5
10		739	754	770	785	800	816	831	846	861	877	892	40	15	6 9, 0
20		892	907	923	938	953	968	984	999	1014	1029	1045	30	15	7 10, 5
30	8.14	045	060	075	090	106	121	136	151	166	182	197	20	15	8 12, 0
40		197	212	227	242	258	273	288	303	318	333	348	10	15	9 13, 5
50		348	364	379	394	409	424	439	454	469	484	500	0 12	15	
48 0		500	515	530	545	560	575	590	605	620	635	650	50	15	14
10		650	665	680	695	710	725	740	755	770	785	800	40	15	1 1, 4
20		800	815	830	845	860	875	890	905	920	935	950	30	15	2 2, 8
30		950	965	980	994	1009	1024	1039	1054	1069	1084	1099	20	15	3 4, 2
40	8.15	099	114	128	143	158	173	188	203	218	232	247	10	15	4 5, 6
50		247	262	277	292	306	321	336	351	366	380	395	0 11	15	5 7, 0
49 0		395	410	425	439	454	469	484	498	513	528	543	50	15	6 8, 4
10		543	557	572	587	602	616	631	646	660	675	690	40	15	7 9, 8
20		690	704	719	734	748	763	778	792	807	822	836	30	15	8 11, 2
30		836	851	865	880	895	909	924	938	953	968	982	20	15	9 12, 6
40		982	997	1011	1026	1040	1055	1070	1084	1099	1113	1128	10	15	
50	8.16	128	142	157	171	186	200	215	229	244	258	273	0 10	14	
	10''	9''	8''	7''	6''	5''	4''	3''	2''	1''	0''	' '	d.	P. P.	

89° L. Cotg.

9.99	'	''	0"	1"	2"	3"	4"	5"	6"	7"	8"	9"	10"		d.	
995	50	0	8.16	268	288	297	311	326	340	355	369	384	398	418	50	14
995	10		418	427	441	456	470	485	499	518	528	542	557	40	14	
995	20		557	571	585	600	614	628	648	657	672	686	700	80	14	
995	30		700	715	729	743	757	772	786	800	815	829	843	20	14	
995	40		843	858	872	886	900	915	929	943	957	972	986	10	14	
995	50		986	*000	*014	*029	*043	*057	*071	*085	*100	*114	*128	0	9	
995	51	0	8.17	128	142	156	171	185	199	218	227	241	256	270	50	14
995	10		270	284	298	312	326	340	355	369	383	397	411	40	14	
995	20		411	425	439	453	467	481	495	510	524	538	552	30	14	
995	30		552	566	580	594	608	622	636	650	664	678	692	20	14	
995	40		692	706	720	734	748	762	776	790	804	818	832	10	14	
995	50		832	846	860	874	888	902	916	930	943	957	971	0	8	
995	52	0	971	985	999	*013	*027	*041	*055	*069	*082	*096	*110	50	14	
995	10		8.18	110	124	138	152	166	180	193	207	221	235	249	40	14
995	20		249	263	276	290	304	318	332	345	359	373	387	30	14	
995	30		387	401	414	428	442	456	469	483	497	511	524	20	14	
995	40		524	538	552	566	579	593	607	621	634	648	662	10	14	
995	50		662	675	689	708	716	730	744	757	771	785	798	0	7	
995	53	0	798	812	826	839	853	867	880	894	908	921	935	50	14	
995	10		935	948	962	976	989	*003	*016	*030	*044	*057	*071	40	14	
995	20		8.19	071	084	098	111	125	139	152	166	179	193	206	30	14
995	30		206	220	233	247	260	274	287	301	314	328	341	20	14	
995	40		341	355	368	382	395	409	423	436	449	463	476	10	14	
995	50		476	489	503	516	530	543	557	570	583	597	610	0	6	
995	54	0	610	624	637	650	664	677	691	704	717	731	744	50	18	
995	10		744	757	771	784	797	811	824	837	851	864	877	40	18	
995	20		877	891	904	917	931	944	957	971	984	997	*010	30	18	
995	30		8.20	010	024	037	050	064	077	090	103	117	130	20	18	
995	40		143	156	170	183	196	209	222	236	249	262	275	10	18	
994	50		275	288	302	315	328	341	354	368	381	394	407	0	5	
994	55	0	407	420	433	446	460	473	486	499	512	525	538	50	18	
994	10		538	552	565	578	591	604	617	630	643	656	669	40	18	
994	20		669	683	696	709	722	735	748	761	774	787	800	30	18	
994	30		800	813	826	839	852	865	878	891	904	917	930	20	18	
994	40		930	943	956	969	982	995	*008	*021	*034	*047	*060	10	18	
994	50		8.21	060	073	086	099	112	125	138	151	164	177	0	4	
994	56	0	189	202	215	228	241	254	267	280	293	306	319	50	18	
994	10		319	331	344	357	370	383	396	409	422	434	447	40	18	
994	20		447	460	473	486	499	511	524	537	550	563	576	30	18	
994	30		576	588	601	614	627	640	652	665	678	691	703	20	18	
994	40		703	716	729	742	754	767	780	793	805	818	831	10	18	
994	50		831	844	856	869	882	895	907	920	933	945	958	0	3	
994	57	0	958	971	983	996	*009	*022	*034	*047	*060	*072	*085	50	18	
994	10		8.22	085	098	110	123	136	148	161	173	186	199	211	40	18
994	20		211	224	237	249	262	274	287	300	312	325	337	30	18	
994	30		337	350	363	375	388	400	413	425	438	451	463	20	18	
994	40		463	476	488	501	513	526	538	551	563	576	588	10	12	
994	50		588	601	613	626	638	651	663	676	688	701	713	0	2	
994	58	0	713	726	738	751	763	776	788	801	813	826	838	50	12	
994	10		838	850	863	875	888	900	913	925	937	950	962	40	12	
994	20		962	975	987	999	*012	*024	*037	*049	*061	*074	*086	30	12	
994	30		8.23	086	098	111	123	136	148	160	173	185	197	20	12	
994	40		210	222	234	247	259	271	284	296	308	321	333	10	12	
994	50		333	345	357	370	382	394	407	419	431	443	456	0	1	
994	59	0	456	468	480	493	505	517	529	541	554	566	578	50	12	
994	10		578	590	603	615	627	639	652	664	676	688	700	40	12	
994	20		700	713	725	737	749	761	773	786	798	810	822	30	12	
994	30		822	834	846	859	871	883	895	907	919	931	944	20	12	
994	40		944	956	968	980	992	*004	*016	*028	*041	*053	*065	10	12	
994	50		8.24	065	077	089	101	113	125	137	149	161	173	0	0	
9.99			10"	9"	8"	7"	6"	5"	4"	3"	2"	1"	0"	"	'	d.

L. Tang.

0°

	0''	1''	2''	3''	4''	5''	6''	7''	8''	9''	10''		d.	P. P.
50 0	8.16 278	287	292	298	304	310	316	322	328	334	340	50	14	
10	417	432	446	460	475	489	504	518	532	547	561	40	14	
20	561	576	590	604	619	633	647	662	676	691	705	30	14	
30	705	719	734	748	762	776	791	805	819	834	848	20	14	
40	848	862	877	891	905	919	934	948	962	976	991	10	14	
50	991	1005	1019	1033	1048	1062	1076	1090	1104	1119	1133	0 9	14	15
51 0	8.17 188	147	161	175	190	204	218	232	246	260	275	50	14	1 1.5
10	275	289	303	317	331	345	359	373	388	402	416	40	14	2 8.0
20	416	430	444	458	472	486	500	514	528	542	557	30	14	3 4.5
30	557	571	585	599	613	627	641	655	669	683	697	20	14	4 6.0
40	697	711	725	739	753	767	781	795	809	823	837	10	14	5 7.5
50	837	851	865	879	893	907	921	934	948	962	976	0 8	14	6 9.0
52 0	8.18 115	129	143	157	171	185	198	212	226	240	254	50	14	7 10.5
10	254	268	282	295	309	323	337	351	364	378	392	40	14	8 12.0
20	392	406	419	433	447	461	475	488	502	516	530	30	14	9 13.5
30	530	543	557	571	585	599	612	626	639	653	667	20	14	
40	667	681	694	708	722	735	749	763	776	790	804	10	14	
50												0 7	14	
53 0	8.19 076	090	104	118	132	146	159	173	187	201	215	50	14	14
10	215	229	243	257	271	285	298	312	326	340	354	40	14	1 1.4
20	354	368	382	396	410	424	437	451	465	479	493	30	14	2 2.8
30	493	507	521	535	549	563	576	590	604	618	632	20	14	3 4.2
40	632	646	660	674	688	702	715	729	743	757	771	10	14	4 5.6
50	771	785	799	813	827	841	854	868	882	896	910	0 6	14	5 7.0
54 0	8.20 016	029	042	055	069	082	096	109	122	135	149	50	18	6 8.4
10	149	162	175	188	201	215	228	241	254	268	281	40	18	7 9.8
20	281	294	307	320	334	347	360	373	386	399	413	30	18	8 11.2
30	413	426	439	452	465	479	492	505	518	531	545	20	18	9 12.6
40	545	558	571	584	597	611	624	637	650	663	677	10	18	
50	677	690	703	716	729	743	756	769	782	795	809	0 5	18	
55 0	8.21 016	029	042	055	069	082	096	109	122	135	149	50	18	18
10	149	162	175	188	201	215	228	241	254	268	281	40	18	1 1.8
20	281	294	307	320	334	347	360	373	386	399	413	30	18	2 2.6
30	413	426	439	452	465	479	492	505	518	531	545	20	18	3 3.9
40	545	558	571	584	597	611	624	637	650	663	677	10	18	4 5.2
50	677	690	703	716	729	743	756	769	782	795	809	0 4	18	5 6.5
56 0	8.22 016	029	042	055	069	082	096	109	122	135	149	50	18	6 7.8
10	149	162	175	188	201	215	228	241	254	268	281	40	18	7 9.1
20	281	294	307	320	334	347	360	373	386	399	413	30	18	8 10.4
30	413	426	439	452	465	479	492	505	518	531	545	20	18	9 11.7
40	545	558	571	584	597	611	624	637	650	663	677	10	18	
50	677	690	703	716	729	743	756	769	782	795	809	0 3	18	
57 0	8.23 016	029	042	055	069	082	096	109	122	135	149	50	18	12
10	149	162	175	188	201	215	228	241	254	268	281	40	18	1 1.2
20	281	294	307	320	334	347	360	373	386	399	413	30	18	2 2.4
30	413	426	439	452	465	479	492	505	518	531	545	20	18	3 3.6
40	545	558	571	584	597	611	624	637	650	663	677	10	18	4 4.8
50	677	690	703	716	729	743	756	769	782	795	809	0 2	18	5 6.0
58 0	8.24 016	029	042	055	069	082	096	109	122	135	149	50	18	6 7.2
10	149	162	175	188	201	215	228	241	254	268	281	40	18	7 8.4
20	281	294	307	320	334	347	360	373	386	399	413	30	18	8 9.6
30	413	426	439	452	465	479	492	505	518	531	545	20	18	9 10.8
40	545	558	571	584	597	611	624	637	650	663	677	10	18	
50	677	690	703	716	729	743	756	769	782	795	809	0 1	18	
59 0	8.25 016	029	042	055	069	082	096	109	122	135	149	50	18	
10	149	162	175	188	201	215	228	241	254	268	281	40	18	
20	281	294	307	320	334	347	360	373	386	399	413	30	18	
30	413	426	439	452	465	479	492	505	518	531	545	20	18	
40	545	558	571	584	597	611	624	637	650	663	677	10	18	
50	677	690	703	716	729	743	756	769	782	795	809	0 0	18	
	10''	9''	8''	7''	6''	5''	4''	3''	2''	1''	0''		d.	P. P.

89° L. Cotg.

9.99	'	0"	10"	20"	30"	40"	50"	60"	d.	P. P.
993	0	8.24 186	806	426	546	666	785	908	59	120
993	1	908	922	140	255	375	498	609	58	118
993	2	8.25 609	726	842	955	1074	1189	1304	57	116
993	3	8.26 804	419	538	648	761	875	988	56	114
992	4	989	101	214	326	438	550	661	55	112
992	5	8.27 661	778	888	994	1104	1215	1324	54	110
992	6	8.28 324	484	548	652	761	869	977	53	109
992	7	977	105	198	300	407	514	621	52	107
992	8	8.29 621	727	838	939	1044	1150	1255	51	106
991	9	8.30 255	859	464	568	672	776	879	50	104
991	10	879	988	1086	1183	1291	1398	1495	49	108
991	11	8.31 495	597	699	800	901	1002	1108	48	101
990	12	8.32 108	208	308	408	508	602	702	47	100
990	13	702	801	899	993	1096	1195	1292	46	98
990	14	8.33 292	390	488	585	682	779	875	45	97
990	15	875	972	1068	1164	1260	1355	1450	44	96
989	16	8.34 450	546	640	735	830	924	1018	43	95
989	17	8.35 018	112	206	299	392	485	578	42	98
989	18	678	671	764	856	948	1040	1131	41	92
989	19	8.36 181	228	314	405	496	587	678	40	91
989	20	678	763	853	948	1038	1128	1217	39	90
989	21	8.37 217	306	395	484	578	662	750	38	89
988	22	750	883	926	1014	1101	1189	1276	37	88
987	23	8.38 276	368	450	537	624	710	796	36	87
987	24	796	882	968	1054	1139	1225	1310	35	86
987	25	8.39 810	895	490	565	649	734	818	34	85
986	26	813	902	936	1020	1103	1187	1270	33	84
986	27	8.40 320	408	486	569	651	734	816	32	88
986	28	816	893	930	1002	1084	1165	1247	31	82
985	29	8.41 807	888	469	550	631	711	792	30	81
985	30	792	872	952	1032	1112	1192	1272	29	90
985	31	8.42 272	351	430	510	589	667	746	28	79
984	32	746	825	908	982	1060	1138	1216	27	78
984	33	8.43 816	898	371	448	526	608	680	26	77
984	34	690	757	834	910	987	1068	1139	25	76
983	35	8.44 189	216	292	367	443	519	594	24	76
983	36	594	669	745	820	895	969	1044	23	75
983	37	8.45 044	119	198	267	341	415	489	22	74
982	38	489	568	637	710	784	857	930	21	74
982	39	980	1008	1076	1149	1222	1294	1366	20	73
982	40	8.46 866	489	511	588	665	747	799	19	72
981	41	799	870	942	1018	1084	1155	1226	18	71
981	42	8.47 226	297	363	439	509	580	650	17	71
981	43	650	720	790	860	930	1000	1069	16	70
980	44	8.48 069	139	208	278	347	416	485	15	69
980	45	485	554	622	691	760	828	896	14	68
979	46	596	665	733	801	869	936	1004	13	68
979	47	8.49 804	872	489	506	574	641	705	12	67
979	48	704	775	842	908	975	1042	1108	11	67
978	49	8.50 103	174	241	307	378	449	504	10	66
978	50	504	570	636	701	767	832	897	9	66
977	51	897	968	1023	1092	1157	1222	1287	8	65
977	52	8.51 287	351	416	480	544	609	673	7	64
977	53	678	737	801	864	928	992	1055	6	64
976	54	8.52 055	119	182	245	308	371	434	5	63
976	55	484	497	560	623	685	748	810	4	63
975	56	810	872	935	997	1059	1121	1183	3	62
975	57	8.53 138	245	306	368	429	491	552	2	62
974	58	552	614	675	736	797	858	919	1	61
974	59	919	979	1040	1101	1161	1222	1282	0	60
9.99		60"	50"	40"	30"	20"	10"	0"	d.	P. P.

	0"	10"	20"	30"	40"	50"	60"	d.	P. P.
0	8.24	192	318	438	558	672	791	910	59 120
1	910	029	147	265	382	500	616	732	58 118
2	8.25	616	738	849	965	081	196	312	57 116
3	8.26	812	426	541	655	769	882	996	56 114
4	996	109	221	334	446	558	669	781	55 112
5	8.27	669	790	891	992	112	223	332	54 110
6	8.28	892	442	551	660	769	877	986	53 109
7	986	094	201	309	416	523	629	734	52 107
8	8.29	629	736	842	947	058	158	268	51 106
9	8.30	268	368	478	577	681	785	888	50 104
10	888	992	095	198	300	408	505	601	49 103
11	8.31	505	606	706	809	911	012	112	48 101
12	8.32	112	218	318	418	518	612	711	47 100
13	711	810	909	008	106	205	302	400	46 98
14	8.33	302	400	498	595	692	789	886	45 97
15	886	992	078	174	270	366	461	555	44 96
16	8.34	461	556	651	746	840	935	029	43 95
17	8.35	029	128	217	310	408	497	590	42 94
18	590	689	775	867	959	051	148	241	41 92
19	8.36	148	245	326	417	508	599	689	40 91
20	689	790	870	960	050	140	229	318	39 90
21	8.37	229	318	408	497	585	674	762	38 89
22	762	850	938	026	114	202	289	377	37 88
23	8.38	289	376	463	550	636	723	809	36 87
24	809	895	981	067	153	238	323	408	35 86
25	8.39	823	408	498	578	668	747	832	34 85
26	832	916	000	088	167	250	334	418	33 84
27	8.40	334	417	500	588	665	748	830	32 83
28	880	918	995	077	158	240	321	402	31 82
29	8.41	321	408	484	565	646	726	807	30 81
30	807	887	967	048	127	207	287	366	29 80
31	8.42	287	366	446	525	604	683	762	28 79
32	762	840	919	997	075	154	232	311	27 78
33	8.43	232	309	387	464	542	619	696	26 77
34	696	773	850	927	008	080	156	232	25 77
35	8.44	156	232	308	384	460	536	611	24 76
36	611	686	762	837	913	987	061	136	23 75
37	8.45	061	136	210	285	359	433	507	22 74
38	507	581	655	728	802	875	948	021	21 74
39	948	021	094	167	240	312	385	458	20 73
40	8.46	385	457	529	602	674	745	817	19 72
41	817	889	960	032	103	174	245	316	18 71
42	8.47	245	316	387	458	528	599	669	17 71
43	669	740	810	880	950	020	089	158	16 70
44	8.48	089	159	228	298	367	436	505	15 69
45	505	574	643	711	780	849	917	985	14 69
46	917	985	053	121	189	257	325	393	13 68
47	8.49	325	393	460	528	595	662	729	12 67
48	729	796	863	930	997	063	130	197	11 67
49	8.50	196	263	329	395	461	527	593	10 66
50	527	593	658	724	789	855	920	985	9 66
51	920	985	050	115	180	245	310	375	8 65
52	8.51	310	374	439	503	568	632	696	7 64
53	696	760	824	888	952	015	079	143	6 64
54	8.52	079	143	206	269	332	396	459	5 63
55	459	522	584	647	710	772	835	897	4 63
56	835	897	960	022	084	146	208	270	3 62
57	8.53	208	270	332	393	455	516	578	2 62
58	578	639	700	762	823	884	945	006	1 61
59	945	005	066	127	187	248	308	369	0 60
	60"	50"	40"	30"	20"	10"	0"	d.	P. P.

9.99	'	0"	10"	20"	30"	40"	50"	60"			d.	P. P.
974	0	8.54 282	842	402	462	522	582	642	59	978	60	<b>61</b>
978	1	642	702	762	821	881	940	999	58	978	60	
978	2	999	059	118	177	236	295	354	57	972	59	
978	3	8.55 854	418	471	530	589	647	705	56	972	58	
972	4	705	764	822	880	938	996	054	55	971	58	
971	5	8.56 054	112	170	227	285	342	400	54	971	58	1 6.1 2 12.2 3 18.3 4 24.4 5 30.5 6 36.6 7 42.7 8 48.8 9 54.9
971	6	400	457	515	572	629	686	743	53	970	57	
970	7	742	800	857	914	970	027	084	52	970	57	
970	8	8.57 084	140	196	252	309	365	421	51	969	56	
969	9	421	477	533	589	645	701	757	50	969	56	
969	10	757	812	868	923	979	034	089	49	968	55	<b>60</b>
968	11	8.58 089	144	200	255	310	364	419	48	968	55	
968	12	419	474	529	583	638	692	747	47	967	55	
967	13	747	801	856	910	964	018	072	46	967	54	
967	14	8.59 072	126	180	234	288	341	395	45	967	54	
967	15	395	448	502	555	609	662	715	44	966	53	1 6.0 2 12.0 3 18.0 4 24.0 5 30.0 6 36.0 7 42.0 8 48.0 9 54.0
966	16	715	768	821	874	927	980	033	43	966	53	
966	17	8.60 033	086	139	191	244	296	349	42	965	53	
965	18	349	401	454	506	558	610	662	41	964	52	
964	19	662	714	766	818	870	922	973	40	964	52	
964	20	973	025	077	128	180	231	282	39	968	52	<b>59</b>
963	21	8.61 282	334	385	436	487	538	589	38	968	51	
962	22	589	640	691	742	792	843	894	37	962	51	
962	23	894	944	995	045	096	146	196	36	962	50	
962	24	8.62 196	246	297	347	397	447	497	35	961	50	
961	25	497	546	596	646	696	745	795	34	961	50	1 5.9 2 11.8 3 17.7 4 23.6 5 29.5 6 35.4 7 41.3 8 47.2 9 53.1
961	26	795	844	894	943	993	042	091	33	960	49	
960	27	8.63 091	140	189	238	288	336	385	32	960	49	
960	28	385	434	483	532	580	629	678	31	959	49	
959	29	678	726	775	823	871	920	968	30	959	48	
959	30	968	016	064	112	160	208	256	29	958	48	<b>58</b>
958	31	8.64 256	304	352	400	448	495	542	28	958	48	
958	32	542	590	638	685	733	780	827	27	957	47	
957	33	827	875	922	969	016	063	110	26	956	47	
956	34	8.65 110	157	204	251	298	344	391	25	956	47	
956	35	391	438	484	531	577	624	670	24	955	46	1 5.8 2 11.6 3 17.4 4 23.2 5 29.0 6 34.8 7 40.6 8 46.4 9 52.2
955	36	670	717	763	809	855	901	947	23	955	46	
955	37	947	994	040	085	131	177	222	22	954	46	
954	38	8.66 222	269	314	360	406	451	497	21	954	46	
954	39	497	542	588	633	678	724	769	20	953	45	
953	40	769	814	859	904	949	994	039	19	952	45	<b>57</b>
952	41	8.67 039	084	129	174	219	263	308	18	952	45	
952	42	308	352	397	442	486	531	575	17	951	44	
951	43	575	619	664	708	752	796	841	16	951	44	
951	44	841	885	929	973	017	060	104	15	950	44	
950	45	8.68 104	148	192	236	279	323	367	14	949	44	1 5.7 2 11.4 3 17.1 4 22.8 5 28.5 6 34.2 7 39.9 8 45.6 9 51.3
949	46	367	410	454	497	540	584	627	13	949	43	
949	47	627	670	714	757	800	843	886	12	948	43	
948	48	886	929	972	015	058	101	144	11	948	43	
948	49	8.69 144	187	229	272	315	357	400	10	947	43	
947	50	400	442	485	527	570	612	654	9	946	42	<b>56</b>
946	51	654	697	739	781	823	865	907	8	946	42	
946	52	907	949	991	038	075	117	159	7	945	42	
945	53	8.70 159	201	242	284	326	367	409	6	944	42	
944	54	409	451	492	534	575	616	658	5	944	42	
944	55	658	699	740	781	823	864	905	4	943	41	1 5.6 2 11.3 3 16.8 4 22.4 5 28.0 6 33.6 7 39.2 8 44.8 9 50.4
943	56	8.71 151	192	232	273	314	355	395	3	942	41	
942	57	395	436	476	517	557	598	638	1	941	40	
942	58	638	679	719	759	800	840	880	0	940	40	
941	59											
		60"	50"	40"	30"	20"	10"	0"	'	9.99	d.	P. P.

	0"	10"	20"	30"	40"	50"	60"		d.	P. P.		
0	8.54	808	869	429	489	549	609	669	59	60		
1		669	729	789	848	908	967	027	58	60		
2	8.55	027	086	145	205	264	323	382	57	59		
3		862	441	499	558	617	675	734	56	59		
4		734	792	550	909	967	*025	*088	55	58		
5	8.56	058	141	199	256	314	372	429	54	58		
6		429	487	544	601	659	716	773	53	57		
7		773	830	887	944	*000	*057	*114	52	57		
8	8.57	114	170	227	283	340	396	452	51	56		
9		452	508	564	620	676	732	788	50	56		
10		788	843	899	955	*010	*065	*121	49	56		
11	8.58	121	176	231	286	341	396	451	48	55		
12		451	506	561	616	670	725	779	47	55		
13		779	834	888	943	997	*051	*105	46	54		
14	8.59	105	159	213	267	321	375	428	45	54		
15		428	482	536	589	642	696	749	44	54		
16		749	802	856	909	962	*015	*068	43	53		
17	8.60	068	121	173	226	279	331	384	42	53		
18		824	486	489	541	598	646	698	41	52		
19		698	750	802	854	906	958	*009	40	52		
20	8.61	009	061	113	164	216	267	319	39	52		
21		819	870	422	473	524	575	626	38	51		
22		626	677	728	779	830	881	931	37	51		
23		931	982	*088	*038	*184	*184	*284	36	50		
24	8.62	284	285	385	385	485	485	585	35	50		
25		585	585	685	685	785	784	884	34	50		
26		884	884	988	988	*032	*081	*181	33	50		
27	8.63	181	180	229	278	328	377	426	32	49		
28		426	475	528	572	621	670	718	31	49		
29		718	767	816	864	918	961	*009	30	48		
30	8.64	009	058	106	154	202	250	298	29	48		
31		298	346	394	442	490	538	585	28	48		
32		585	633	681	728	776	823	870	27	48		
33		870	918	965	*012	*060	*107	*154	26	47		
34	8.65	154	201	248	295	342	388	435	25	47		
35		435	482	529	575	622	668	715	24	47		
36		715	761	808	854	900	947	993	23	46		
37		993	*089	*085	*181	*177	*223	*269	22	46		
38	8.66	269	315	361	406	452	498	543	21	46		
39		543	589	634	680	725	771	816	20	46		
40		816	861	906	952	997	*042	*087	19	45		
41	8.67	087	132	177	222	267	312	356	18	45		
42		356	401	446	490	535	579	624	17	45		
43		624	668	713	757	801	846	890	16	44		
44		890	934	978	*022	*066	*110	*154	15	44		
45	8.68	154	198	242	286	330	373	417	14	44		
46		417	461	504	548	592	635	678	13	44		
47		678	722	765	808	852	895	938	12	43		
48		938	981	*024	*067	*110	*153	*196	11	43		
49	8.69	196	239	282	325	368	410	453	10	43		
50		453	496	538	581	623	666	708	9	42		
51		708	750	793	835	877	920	962	8	42		
52		962	*004	*046	*088	*130	*172	*214	7	42		
53	8.70	214	256	298	339	381	423	465	6	42		
54		465	506	548	589	631	673	714	5	42		
55		714	755	797	838	879	921	962	4	41		
56		962	*008	*044	*085	*126	*167	*208	3	41		
57	8.71	208	249	290	331	372	413	453	2	41		
58		453	494	535	575	616	657	697	1	41		
59		697	738	778	819	859	899	940	0	40		
	60"	50"	40"	30"	20"	10"	0"		d.	P. P.		

9.99	'	0"	10"	20"	30"	40"	50"	60"			d.	P. P.	
940	0	8.71	880	920	960	*000	*040	*080	*120	59	940	40	
940	1	8.72	120	160	200	240	280	320	359	58	939	40	
939	2		359	399	439	478	518	558	597	57	938	40	
938	8		597	637	676	716	755	794	834	56	938	40	
938	4		884	878	912	951	991	*080	*069	55	937	39	
937	5	8.78	069	108	147	186	225	264	308	54	936	39	
936	6		308	342	380	419	458	497	535	53	936	39	
936	7		535	574	618	651	690	728	767	52	935	39	
935	8		767	805	844	882	920	959	997	51	934	38	
934	9		997	*085	*078	*112	*150	*188	*226	50	934	38	
934	10	8.74	226	264	302	340	378	416	454	49	933	38	
933	11		454	491	529	567	605	643	680	48	932	38	
932	12		680	718	755	793	831	868	906	47	932	38	
932	13		906	943	980	*018	*055	*092	*130	46	931	37	
931	14	8.75	180	167	204	241	279	316	353	45	930	37	
930	15		353	390	427	464	501	538	575	44	929	37	
929	16		575	612	648	685	722	759	795	43	929	37	
929	17		795	832	869	905	942	979	*015	42	928	37	
928	18	8.76	015	052	088	125	161	197	234	41	927	36	
927	19		234	270	306	343	379	415	451	40	926	36	
926	20		451	487	523	559	595	631	667	39	926	36	
926	21		667	703	739	775	811	847	883	38	925	36	
925	22		883	919	954	990	*026	*061	*097	37	924	36	
924	23	8.77	097	133	168	204	239	275	310	36	923	36	
923	24		310	346	381	416	452	487	522	35	923	35	
923	25		522	558	593	628	663	698	733	34	922	35	
922	26		733	768	803	838	873	908	943	33	921	35	
921	27		943	978	*013	*048	*083	*118	*152	32	920	35	
920	28	8.78	152	187	222	257	291	326	360	31	920	35	
920	29		360	395	430	464	499	533	568	30	919	35	
919	30		568	602	636	671	705	739	774	29	918	34	
918	31		774	808	842	876	910	945	979	28	917	34	
917	32		979	*013	*047	*081	*115	*149	*183	27	917	34	
917	33	8.79	183	217	251	284	318	352	386	26	916	34	
916	34		386	420	453	487	521	555	588	25	915	34	
915	35		588	622	655	689	722	756	789	24	914	34	
914	36		789	823	856	890	923	956	990	23	913	34	
913	37		990	*023	*056	*090	*123	*156	*189	22	913	33	
913	38	8.80	189	222	255	289	322	355	388	21	912	33	
912	39		388	421	454	487	519	552	585	20	911	33	
911	40		585	618	651	684	716	749	782	19	910	33	
910	41		782	815	847	880	912	945	978	18	909	33	
909	42		978	*010	*043	*075	*108	*140	*173	17	909	32	
909	43	8.81	173	205	237	270	302	334	367	16	908	32	
908	44		367	399	431	463	496	528	560	15	907	32	
907	45		560	592	624	656	688	720	752	14	906	32	
906	46		752	784	816	848	880	912	944	13	905	32	
905	47		944	975	*007	*039	*071	*103	*134	12	904	32	
904	48	8.82	134	166	198	229	261	293	324	11	904	32	
904	49		324	356	387	419	450	482	513	10	903	32	
903	50		513	544	576	607	639	670	701	9	902	31	
902	51		701	732	764	795	826	857	888	8	901	31	
901	52		888	920	951	982	*013	*044	*075	7	900	31	
900	53	8.83	075	106	137	168	199	230	261	6	899	31	
899	54		261	292	322	353	384	415	446	5	898	31	
898	55		446	476	507	538	568	599	630	4	898	31	
898	56		630	660	691	721	752	783	813	3	897	30	
897	57		813	844	874	904	935	965	996	2	896	30	
896	58		996	*026	*056	*087	*117	*147	*177	1	895	30	
895	59	8.84	177	208	238	268	298	328	358	0	894	30	
		60"	50"	40"	30"	20"	10"	0"		9.99	d.	P. P.	



L. Tang.

3°

'	0"	10"	20"	30"	40"	50"	60"		d.	P. P.
0	8.71	940	980	*090	*060	*100	*141	*181	59	40
1	8.73	181	221	261	301	341	380	420	58	40
2		490	460	500	540	579	619	659	57	40
3		659	698	738	777	817	856	896	56	40
4		896	935	975	*014	*053	*093	*132	55	39
5	8.73	132	171	210	249	288	327	366	54	39
6		366	405	444	483	522	561	600	53	39
7		600	638	677	716	754	793	832	52	39
8		832	870	909	947	986	*024	*063	51	38
9	8.74	063	101	139	178	216	254	292	50	38
10		292	330	369	407	445	483	521	49	38
11		521	559	597	634	672	710	748	48	38
12		748	786	823	861	899	936	974	47	38
13		974	*013	*049	*087	*124	*162	*199	46	38
14	8.75	199	236	274	311	348	385	423	45	37
15		423	460	497	534	571	608	645	44	37
16		645	682	719	756	793	830	867	43	37
17		867	904	940	977	*014	*051	*087	42	37
18	8.76	087	124	160	197	233	270	306	41	36
19		306	343	379	416	453	489	525	40	36
20		525	561	597	633	669	706	742	39	36
21		742	778	814	850	886	922	958	38	36
22		958	994	*030	*065	*101	*137	*173	37	36
23	8.77	173	208	244	280	315	351	387	36	36
24		387	422	458	493	529	564	600	35	36
25		600	635	670	706	741	776	811	34	35
26		811	847	882	917	952	987	*022	33	35
27	8.78	022	057	092	127	162	197	232	32	35
28		232	267	302	337	371	406	441	31	35
29		441	475	510	545	579	614	649	30	35
30		649	683	718	752	787	821	855	29	34
31		855	890	924	958	993	*027	*061	28	34
32	8.79	061	096	130	164	198	232	266	27	34
33		266	300	334	368	402	436	470	26	34
34		470	504	538	573	606	639	673	25	34
35		673	707	741	774	808	842	875	24	34
36		875	909	943	976	*009	*043	*076	23	34
37	8.80	076	110	143	177	210	243	277	22	34
38		277	310	343	376	409	443	476	21	33
39		476	509	542	575	608	641	674	20	33
40		674	707	740	773	806	839	872	19	33
41		873	905	937	970	*008	*036	*068	18	33
42	8.81	068	101	134	166	199	232	264	17	33
43		264	297	329	362	394	427	459	16	32
44		459	491	524	556	588	621	653	15	32
45		653	685	717	750	782	814	846	14	32
46		846	878	910	942	974	*006	*038	13	32
47	8.82	038	070	102	134	166	198	230	12	32
48		230	262	293	325	357	389	420	11	32
49		420	452	484	515	547	579	610	10	32
50		610	642	673	705	736	768	799	9	32
51		799	831	862	893	925	956	987	8	31
52		987	*019	*050	*081	*112	*144	*175	7	31
53	8.83	175	206	237	268	299	330	361	6	31
54		361	392	423	454	485	516	547	5	31
55		547	578	609	640	671	701	732	4	31
56		732	763	794	824	855	886	916	3	31
57		916	947	978	*008	*039	*069	*100	2	31
58	8.84	100	130	161	191	222	252	282	1	30
59		282	313	343	374	404	434	464	0	30
	60"	50"	40"	30"	20"	10"	0"		d.	P. P.

86°

L. Cotg.

9.99		0"	10"	20"	30"	40"	50"	60"			d.	P. P.	
894	0	8.84	358	389	419	449	479	509	539	59	893	30	
898	1		589	569	599	629	659	688	718	58	892	30	
892	2		718	748	778	808	838	867	897	57	891	30	
891	3		897	927	957	986	*016	*045	*075	56	891	30	
891	4	8.85	075	105	134	164	193	223	252	55	890	30	
890	5		252	282	311	341	370	400	429	54	889	30	
889	6		429	458	488	517	546	576	605	53	888	29	
888	7		605	634	663	693	722	751	780	52	887	29	
887	8		780	809	838	867	896	926	955	51	886	29	
886	9		955	984	*018	*042	*070	*099	*128	50	885	29	
885	10	8.86	128	157	186	215	244	273	301	49	884	29	
884	11		301	330	359	388	416	445	474	48	883	29	
883	12		474	502	531	560	588	617	645	47	882	29	
882	13		645	674	703	731	760	788	816	46	881	29	
881	14		816	845	873	902	930	958	987	45	880	28	
880	15		987	*015	*043	*072	*100	*128	*156	44	879	28	
879	16	8.87	156	185	213	241	269	297	325	43	879	28	
879	17		325	354	382	410	438	466	494	42	878	28	
878	18		494	522	550	578	606	634	661	41	877	28	
877	19		661	689	717	745	773	801	829	40	876	28	
876	20		829	856	884	912	940	967	995	39	875	28	
875	21		995	*023	*050	*078	*106	*133	*161	38	874	28	
874	22	8.88	161	188	216	243	271	298	326	37	873	28	
873	23		326	353	381	408	436	463	490	36	872	27	
872	24		490	518	545	572	600	627	654	35	871	27	
871	25		654	681	709	736	763	790	817	34	870	27	
870	26		817	845	872	899	926	953	980	33	869	27	
869	27		980	*007	*034	*061	*088	*115	*142	32	868	27	
868	28	8.89	142	169	196	223	250	277	304	31	867	27	
867	29		304	330	357	384	411	438	464	30	866	27	
866	30		464	491	518	545	571	598	625	29	865	27	
865	31		625	651	678	704	731	758	784	28	864	26	
864	32		784	811	837	864	890	917	943	27	863	26	
863	33		943	970	996	*023	*049	*075	*102	26	862	26	
862	34	8.90	102	128	154	181	207	233	260	25	861	26	
861	35		260	286	312	338	364	391	417	24	860	26	
860	36		417	443	469	495	521	548	574	23	859	26	
859	37		574	600	626	652	678	704	730	22	858	26	
858	38		730	756	782	808	834	859	885	21	857	26	
857	39		885	911	937	963	989	*015	*040	20	856	26	
856	40	8.91	040	066	092	118	143	169	195	19	855	26	
855	41		195	221	246	272	298	323	349	18	854	26	
854	42		349	374	400	426	451	477	502	17	853	26	
853	43		502	528	553	579	604	630	655	16	852	26	
852	44		655	680	706	731	757	782	807	15	851	25	
851	45		807	833	858	883	909	934	959	14	850	25	
850	46		959	984	*010	*035	*060	*085	*110	13	849	25	
849	47	8.92	110	135	161	186	211	236	261	12	848	25	
848	48		261	286	311	336	361	386	411	11	847	25	
847	49		411	436	461	486	511	536	561	10	846	25	
846	50		561	586	611	636	660	685	710	9	845	25	
845	51		710	735	760	784	809	834	859	8	844	25	
844	52		859	883	908	933	957	982	*007	7	843	25	
843	53	8.93	007	031	056	081	105	130	154	6	842	24	
842	54		154	179	203	228	252	277	301	5	840	24	
841	55		301	326	350	375	399	424	448	4	839	24	
840	56		448	472	497	521	546	570	594	3	838	24	
839	57		594	619	643	667	691	716	740	2	837	24	
838	58		740	764	788	812	837	861	885	1	836	24	
837	59		885	909	933	957	981	*006	*030	0	834	24	
836	60		933	957	981	1005	1029	1053	1077				
835	61		1077	1101	1125	1149	1173	1197	1221				
834	62		1221	1245	1269	1293	1317	1341	1365				
833	63		1365	1389	1413	1437	1461	1485	1509				
832	64		1509	1533	1557	1581	1605	1629	1653				
831	65		1653	1677	1701	1725	1749	1773	1797				
830	66		1797	1821	1845	1869	1893	1917	1941				
829	67		1941	1965	1989	2013	2037	2061	2085				
828	68		2085	2109	2133	2157	2181	2205	2229				
827	69		2229	2253	2277	2301	2325	2349	2373				
826	70		2373	2397	2421	2445	2469	2493	2517				
825	71		2517	2541	2565	2589	2613	2637	2661				
824	72		2661	2685	2709	2733	2757	2781	2805				
823	73		2805	2829	2853	2877	2901	2925	2949				
822	74		2949	2973	2997	3021	3045	3069	3093				
821	75		3093	3117	3141	3165	3189	3213	3237				
820	76		3237	3261	3285	3309	3333	3357	3381				
819	77		3381	3405	3429	3453	3477	3501	3525				
818	78		3525	3549	3573	3597	3621	3645	3669				
817	79		3669	3693	3717	3741	3765	3789	3813				
816	80		3813	3837	3861	3885	3909	3933	3957				
815	81		3957	3981	4005	4029	4053	4077	4101				
814	82		4101	4125	4149	4173	4197	4221	4245				
813	83		4245	4269	4293	4317	4341	4365	4389				
812	84		4389	4413	4437	4461	4485	4509	4533				
811	85		4533	4557	4581	4605	4629	4653	4677				
810	86		4677	4701	4725	4749	4773	4797	4821				
809	87		4821	4845	4869	4893	4917	4941	4965				
808	88		4965	4989	5013	5037	5061	5085	5109				
807	89		5109	5133	5157	5181	5205	5229	5253				
806	90		5253	5277	5301	5325	5349	5373	5397				
805	91		5397	5421	5445	5469	5493	5517	5541				
804	92		5541	5565	5589	5613	5637	5661	5685				
803	93		5685	5709	5733	5757	5781	5805	5829				
802	94		5829	5853	5877	5901	5925	5949	5973				
801	95		5973	5997	6021	6045	6069	6093	6117				
800	96		6117	6141	6165	6189	6213	6237	6261				
799	97		6261	6285	6309	6333	6357	6381	6405				
798	98		6405	6429	6453	6477	6501	6525	6549				
797	99		6549	6573	6597	6621	6645	6669	6693				
796	100		6693	6717	6741	6765	6789	6813	6837				
795	101		6837	6861	6885	6909	6933	6957	6981				
794	102		6981	7005	7029	7053	7077	7101	7125				
793	103		7125	7149	7173	7197	7221	7245	7269				
792	104		7269	7293	7317	7341	7365	7389	7413				
791	105		7413	7437	7461	7485	7509	7533	7557				
790	106		7557	7581	7605	7629	7653	7677	7701				
789	107		7701	7725	7749	7773	7797	7821	7845				
788	108		7845	7869	7893	7917	7941	7965	7989				
787	109		7989	8013	8037	8061	8085	8109	8133				
786	110		8133	8157	8181	8205	8229	8253	8277				
785	111		8277	8301	8325	8349	8373	8397	8421				
784	112		8421	8445	8469	8493	8517	8541	8565				
783	113		8565	8589	8613	8637	8661	8685	8709				
782	114		8709	8733	8757	8781							

L. Tang.

4°

	0"	10"	20"	30"	40"	50"	60"		d.	P. P.
0	8.84	464	495	525	555	585	615	646	59	80
1		646	676	706	736	766	796	826	58	80
2		826	856	886	916	946	976	1006	57	80
3	8.85	006	036	065	095	125	155	185	56	80
4		185	214	244	274	304	333	363	55	80
5		363	392	422	452	481	511	540	54	80
6		540	570	599	629	658	688	717	53	80
7		717	747	776	805	835	864	893	52	29
8		893	922	952	981	1010	1039	1069	51	29
9	8.86	069	098	127	156	185	214	243	50	29
10		243	272	301	330	359	388	417	49	29
11		417	447	475	504	533	562	591	48	29
12		591	619	648	677	706	734	763	47	29
13		763	792	821	849	878	907	935	46	29
14		935	964	992	1021	1049	1078	1106	45	28
15	8.87	106	135	163	192	220	249	277	44	28
16		277	305	334	362	390	419	447	43	28
17		447	475	503	532	560	588	616	42	28
18		616	644	673	701	729	757	785	41	28
19		785	813	841	869	897	925	953	40	28
20		953	981	1009	1037	1065	1092	1120	39	28
21	8.88	120	148	176	204	231	259	287	38	28
22		287	315	343	370	398	425	453	37	28
23		453	481	508	536	563	591	618	36	28
24		618	646	674	701	728	756	783	35	28
25		783	811	838	866	893	920	948	34	28
26		948	975	1002	1029	1057	1084	1111	33	27
27	8.89	111	138	166	193	220	247	274	32	27
28		274	301	328	355	382	410	437	31	27
29		437	464	491	518	545	571	598	30	27
30		598	625	652	679	706	733	760	29	27
31		760	786	813	840	867	894	920	28	27
32		920	947	974	1000	1027	1054	1080	27	27
33	8.90	080	107	134	160	187	213	240	26	27
34		240	266	293	319	346	372	399	25	26
35		399	425	451	478	504	531	557	24	26
36		557	583	610	636	662	688	715	23	26
37		715	741	767	793	820	846	872	22	26
38		872	898	924	950	976	1002	1029	21	26
39	8.91	029	055	081	107	133	159	185	20	26
40		185	211	236	262	288	314	340	19	26
41		340	366	392	418	443	469	495	18	26
42		495	521	547	572	598	624	650	17	26
43		650	675	701	727	752	778	803	16	26
44		803	829	855	880	906	931	957	15	26
45		957	982	1008	1033	1059	1084	1110	14	26
46	8.92	110	135	160	186	211	237	262	13	25
47		262	287	312	338	363	388	414	12	25
48		414	439	464	489	515	540	565	11	25
49		565	590	615	640	665	691	716	10	25
50		716	741	766	791	816	841	866	9	25
51		866	891	916	941	966	991	1016	8	25
52	8.93	016	040	065	090	115	140	165	7	25
53		165	190	215	239	264	289	313	6	25
54		313	338	363	388	412	437	462	5	25
55		462	486	511	536	560	585	609	4	24
56		609	634	658	683	707	732	756	3	24
57		756	781	805	830	854	879	903	2	24
58		903	928	952	976	1001	1025	1049	1	24
59	8.94	049	074	098	122	147	171	195	0	24
	60"	50"	40"	30"	20"	10"	0"			d.
										P. P.

85°

L. Cotg.

9.99	'	0"	10"	20"	30"	40"	50"	60"			d.	P. P.
884	0	8.94 080	054	078	103	126	150	174	59	888	24	
888	1	174	198	222	246	270	294	317	58	892	24	
892	2	817	841	865	889	418	447	461	57	891	24	
891	3	461	484	508	532	556	580	603	56	890	24	24
890	4	608	627	651	675	698	722	746	55	829	24	
829	5	746	769	798	817	840	864	887	54	828	24	1 2.4
828	6	887	911	935	958	982	1005	1029	58	827	24	2 4.8
827	7	8.95 029	052	076	099	123	146	170	52	825	24	3 7.2
825	8	170	193	216	240	263	287	310	51	824	28	4 9.6
824	9	810	833	857	880	408	427	450	50	823	28	5 12.0
823	10	450	473	496	520	543	566	589	49	822	28	6 14.4
822	11	589	618	636	659	682	705	728	48	821	28	7 16.8
821	12	728	752	775	798	821	844	867	47	820	28	8 19.2
820	13	867	890	913	936	959	982	1005	46	819	28	9 21.6
819	14	8.96 005	028	051	074	097	120	143	45	817	28	
817	15	143	166	189	212	234	257	280	44	816	28	1 2.8
816	16	280	308	326	349	371	394	417	43	815	28	2 4.6
815	17	417	440	462	485	508	531	553	42	814	28	3 6.9
814	18	553	576	599	621	644	667	689	41	813	28	4 9.2
813	19	689	712	735	757	780	803	825	40	812	28	5 11.5
812	20	825	847	870	892	915	937	960	39	810	22	6 13.8
810	21	960	982	1005	1027	1050	1073	1095	38	809	22	7 16.1
809	22	8.97 095	117	139	162	184	207	229	37	808	22	8 18.4
808	23	229	251	274	296	318	341	363	36	807	22	9 20.7
807	24	363	385	407	430	452	474	496	35	806	22	
806	25	496	518	541	563	585	607	629	34	804	22	22
804	26	629	651	674	696	718	740	762	33	803	22	
803	27	762	784	806	828	850	872	894	32	802	22	1 2.2
802	28	894	916	938	960	982	1004	1026	31	801	22	2 4.4
801	29	8.98 026	048	070	092	114	135	157	30	800	22	3 6.6
800	30	157	179	201	223	245	266	288	29	798	22	4 8.8
798	31	288	310	332	354	375	397	419	28	797	22	5 11.0
797	32	419	441	462	484	506	527	549	27	796	22	6 13.2
796	33	549	571	592	614	636	657	679	26	795	22	7 15.4
795	34	679	701	722	744	765	787	808	25	794	22	8 17.6
794	35	808	830	851	873	894	916	937	24	792	22	9 19.8
792	36	8.99 066	087	109	130	152	173	194	23	791	22	
791	37	109	130	151	172	193	214	235	22	790	21	21
790	38	194	215	236	257	278	300	321	21	788	21	1 2.1
788	39	322	343	364	385	407	428	450	20	787	21	2 4.2
787	40	450	471	492	513	534	556	577	19	786	21	3 6.3
786	41	577	598	619	640	661	682	704	18	785	21	4 8.4
785	42	704	725	746	767	788	809	830	17	783	21	5 10.5
784	43	830	851	872	893	914	935	956	16	782	21	6 12.6
782	44	8.99 956	977	998	1019	1040	1061	1082	15	781	21	7 14.7
781	45	9.00 082	103	123	144	165	186	207	14	780	21	8 16.8
780	46	207	228	249	269	290	311	332	13	778	21	9 18.9
778	47	332	353	373	394	415	436	456	12	777	21	
777	48	456	477	498	518	539	560	581	11	776	21	20
776	49	581	601	622	642	663	684	704	10	775	21	
775	50	704	725	746	766	787	807	828	9	773	21	1 2.0
773	51	828	848	869	889	910	930	951	8	772	20	2 4.0
772	52	8.99 951	971	992	1012	1033	1053	1074	7	771	20	3 6.0
771	53	9.01 074	094	115	135	155	176	196	6	769	20	4 8.0
769	54	196	217	237	257	278	298	318	5	768	20	5 10.0
768	55	318	339	359	379	399	420	440	4	767	20	6 12.0
767	56	440	460	480	501	521	541	561	3	765	20	7 14.0
765	57	561	582	602	622	642	662	682	2	764	20	8 16.0
764	58	682	702	722	743	763	783	803	1	763	20	9 18.0
763	59	803	823	843	863	883	903	923	0	761	20	
		60"	50"	40"	30"	20"	10"	0"	'	9.99	d.	P. P.

L. Tang.

5°

"	0"	10"	20"	30"	40"	50"	60"		d.	P. P.	
0	8.94	195	219	244	268	292	316	340	59	24	25
1		840	865	889	418	437	461	485	58	24	
2		435	509	583	567	581	606	680	57	24	
3		630	654	678	702	725	749	773	56	24	
4		773	797	821	845	869	893	917	55	24	1 2.5
5		917	941	964	988	*012	*086	*060	54	24	2 5.0
6	8.95	060	083	107	131	155	178	202	53	24	3 7.5
7		202	226	249	273	297	320	344	52	24	4 10.0
8		344	368	391	415	439	462	486	51	24	5 12.5
9		486	509	533	556	580	603	627	50	24	6 15.0
10		627	650	674	697	721	744	767	49	23	7 17.5
11		767	791	814	838	861	884	908	48	23	8 20.0
12		908	931	954	977	*001	*024	*047	47	23	9 22.5
13	8.96	047	071	094	117	140	163	187	46	23	1 2.4
14		187	210	233	256	279	302	325	45	23	2 4.8
15		325	349	373	395	418	441	464	44	23	3 7.2
16		464	487	510	533	556	579	602	43	23	4 9.6
17		602	625	648	671	694	717	739	42	23	5 12.0
18		739	762	785	808	831	854	877	41	23	6 14.4
19		877	899	922	945	968	991	*018	40	23	7 16.8
20	8.97	018	036	059	081	104	127	150	39	23	8 19.2
21		150	172	195	218	240	263	285	38	23	9 21.6
22		285	308	331	353	376	398	421	37	23	1 2.3
23		421	443	466	488	511	533	556	36	23	2 4.6
24		556	579	601	623	646	668	691	35	23	3 6.9
25		691	713	735	758	780	802	825	34	23	4 9.2
26		825	847	869	892	914	936	958	33	23	5 11.5
27		959	981	*008	*025	*048	*070	*092	32	23	6 13.8
28	8.98	092	114	136	159	181	203	225	31	22	7 16.1
29		225	247	269	291	314	336	358	30	22	8 18.4
30		358	380	402	424	446	468	490	29	22	9 20.7
31		490	512	534	556	578	600	622	28	22	1 2.2
32		622	644	666	687	709	731	753	27	22	2 4.4
33		753	775	797	819	841	862	884	26	22	3 6.6
34		884	906	928	950	971	993	*015	25	22	4 8.8
35	8.99	015	037	058	080	102	123	145	24	22	5 11.0
36		145	167	188	210	232	253	275	23	22	6 13.2
37		275	297	318	340	361	383	405	22	22	7 15.4
38		405	426	448	469	491	512	534	21	22	8 17.6
39		534	555	577	598	620	641	662	20	21	9 19.8
40		662	684	705	727	748	769	791	19	21	1 2.1
41		791	812	834	855	876	898	919	18	21	2 4.2
42		919	940	961	983	*004	*025	*046	17	21	3 6.3
43	9.00	046	068	089	110	131	153	174	16	21	4 8.4
44		174	195	216	237	258	280	301	15	21	5 10.5
45		301	322	343	364	385	406	427	14	21	6 12.6
46		427	448	469	490	511	532	553	13	21	7 14.7
47		553	574	595	616	637	658	679	12	21	8 16.8
48		679	700	721	742	763	784	805	11	21	9 18.9
49		805	826	846	867	888	909	930	10	21	1 2.0
50		930	951	971	992	*018	*034	*055	9	21	2 4.0
51	9.01	055	075	096	117	138	158	179	8	21	3 6.0
52		179	200	220	241	262	282	303	7	21	4 8.0
53		303	324	344	365	386	406	427	6	21	5 10.0
54		427	447	468	489	509	530	550	5	20	6 12.0
55		550	571	591	612	632	653	673	4	20	7 14.0
56		673	694	714	735	755	776	796	3	20	8 16.0
57		796	816	837	857	878	898	918	2	20	9 18.0
58		918	939	959	979	*000	*020	*040	1	20	
59	9.02	040	061	081	101	121	142	162	0	20	
	60"	50"	40"	30"	20"	10"	0"		d.	P. P.	

84°

L. Cotg.

	L. Sin.	d.	L. Tang.	e.d.	L. Cotg.	L. Cos.		P. P.			
0	9.01 928	120	9.02 162	121	0.97 585	9.99 761	60	121	120	119	118
1	9.02 048	120	9.02 288	121	0.97 717	9.99 760	59	2.0	2.0	2.0	2.0
2	9.02 168	120	9.02 404	121	0.97 596	9.99 759	58	4.0	4.0	4.0	3.9
3	9.02 288	119	9.02 525	120	0.97 475	9.99 757	57	6.0	6.0	6.0	5.9
4	9.02 402	118	9.02 645	121	0.97 355	9.99 756	56	8.1	8.0	7.9	7.9
5	9.02 520	119	9.02 766	119	0.97 234	9.99 755	55	5	10.1	10.0	9.9
6	9.02 639	118	9.02 885	120	0.97 115	9.99 753	54	6	12.1	12.0	11.9
7	9.02 757	117	9.03 005	119	0.96 995	9.99 752	53	7	14.1	14.0	13.9
8	9.02 874	116	9.03 124	118	0.96 876	9.99 751	52	8	16.1	16.0	15.9
9	9.02 992	117	9.03 242	119	0.96 758	9.99 749	51	9	18.2	18.0	17.9
10	9.03 109	117	9.03 361	118	0.96 639	9.99 748	50	10	20.2	20.0	19.9
11	9.03 226	116	9.03 479	117	0.96 521	9.99 747	49	20	40.8	40.0	39.7
12	9.03 349	116	9.03 597	117	0.96 408	9.99 745	48	30	60.5	60.0	59.5
13	9.03 458	116	9.03 714	118	0.96 286	9.99 744	47	40	80.7	80.0	79.8
14	9.03 574	116	9.03 832	116	0.96 168	9.99 742	46	50	100.8	100.0	99.2
15	9.03 690	115	9.03 948	117	0.96 052	9.99 741	45	117	116	115	114
16	9.03 805	115	9.04 065	116	0.95 935	9.99 740	44	1	2.0	1.9	1.9
17	9.03 920	114	9.04 181	116	0.95 819	9.99 738	43	2	3.9	3.9	3.8
18	9.04 034	115	9.04 297	116	0.95 708	9.99 737	42	3	5.8	5.8	5.7
19	9.04 149	118	9.04 418	115	0.95 587	9.99 736	41	4	7.8	7.7	7.6
20	9.04 262	114	9.04 538	115	0.95 472	9.99 734	40	5	9.8	9.7	9.6
21	9.04 376	114	9.04 648	115	0.95 357	9.99 733	39	6	11.7	11.6	11.5
22	9.04 490	118	9.04 758	115	0.95 242	9.99 731	38	7	13.6	13.5	13.4
23	9.04 608	112	9.04 878	114	0.95 127	9.99 730	37	8	15.6	15.5	15.4
24	9.04 715	118	9.04 987	114	0.95 018	9.99 728	36	9	17.6	17.4	17.2
25	9.04 828	112	9.05 101	118	0.94 899	9.99 727	35	10	19.5	19.8	19.2
26	9.04 940	112	9.05 214	114	0.94 786	9.99 726	34	20	39.0	38.7	38.0
27	9.05 052	112	9.05 328	118	0.94 672	9.99 724	33	30	58.5	58.0	57.5
28	9.05 164	111	9.05 441	112	0.94 559	9.99 723	32	40	78.0	77.8	76.0
29	9.05 275	111	9.05 558	118	0.94 447	9.99 721	31	50	97.5	96.7	95.8
30	9.05 386	111	9.05 666	112	0.94 334	9.99 720	30	118	112	111	110
31	9.05 497	110	9.05 778	112	0.94 222	9.99 718	29	1	1.9	1.9	1.8
32	9.05 607	110	9.05 890	112	0.94 110	9.99 717	28	2	3.8	3.7	3.7
33	9.05 717	110	9.06 002	111	0.93 998	9.99 716	27	3	5.6	5.6	5.5
34	9.05 827	110	9.06 118	111	0.93 887	9.99 714	26	4	7.5	7.5	7.4
35	9.05 937	109	9.06 224	111	0.93 776	9.99 713	25	5	9.4	9.3	9.2
36	9.06 046	109	9.06 335	110	0.93 665	9.99 711	24	6	11.3	11.2	11.1
37	9.06 155	109	9.06 445	111	0.93 555	9.99 710	23	7	13.2	13.1	13.0
38	9.06 264	108	9.06 556	110	0.93 444	9.99 708	22	8	15.1	14.9	14.8
39	9.06 372	109	9.06 666	109	0.93 334	9.99 707	21	9	17.0	16.8	16.6
40	9.06 481	108	9.06 775	110	0.93 225	9.99 705	20	10	18.8	18.7	18.5
41	9.06 589	107	9.06 885	109	0.93 115	9.99 704	19	20	37.7	37.8	37.0
42	9.06 696	108	9.06 994	109	0.93 006	9.99 702	18	30	56.5	56.0	55.5
43	9.06 804	107	9.07 103	108	0.92 897	9.99 701	17	40	75.8	74.7	74.0
44	9.06 911	107	9.07 211	109	0.92 789	9.99 699	16	50	94.2	93.8	92.5
45	9.07 018	106	9.07 320	108	0.92 680	9.99 698	15	109	108	107	106
46	9.07 124	107	9.07 428	108	0.92 572	9.99 696	14	1	1.8	1.8	1.8
47	9.07 231	106	9.07 536	107	0.92 464	9.99 695	13	2	3.6	3.6	3.5
48	9.07 337	105	9.07 643	108	0.92 357	9.99 693	12	3	5.4	5.4	5.3
49	9.07 442	106	9.07 751	107	0.92 249	9.99 692	11	4	7.3	7.2	7.1
50	9.07 548	105	9.07 858	106	0.92 142	9.99 690	10	5	9.1	9.0	8.9
51	9.07 653	105	9.07 964	107	0.92 036	9.99 689	9	6	10.9	10.8	10.7
52	9.07 758	105	9.08 071	106	0.91 929	9.99 687	8	7	12.7	12.6	12.5
53	9.07 863	105	9.08 177	106	0.91 823	9.99 686	7	8	14.5	14.4	14.3
54	9.07 968	104	9.08 283	106	0.91 717	9.99 684	6	9	16.4	16.2	16.0
55	9.08 072	104	9.08 389	106	0.91 611	9.99 683	5	10	18.2	18.0	17.8
56	9.08 176	104	9.08 495	105	0.91 505	9.99 681	4	20	36.8	36.0	35.8
57	9.08 280	108	9.08 600	105	0.91 400	9.99 680	3	30	54.5	54.0	53.0
58	9.08 383	108	9.08 705	105	0.91 295	9.99 678	2	40	72.7	72.0	71.8
59	9.08 486	108	9.08 810	104	0.91 190	9.99 677	1	50	90.8	90.0	89.2
60	9.08 589		9.08 914		0.91 086	9.99 675	0				
	L. Cos.	d.	L. Cotg.	e.d.	L. Tang.	L. Sin.					P. P.

	L. Sin.	d.	L. Tang.	c.d.	L. Cotg.	L. Cos.		P. P.			
0	9.08 589	108	9.08 914	105	0.91 086	9.99 675	60				
1	9.08 692	108	9.09 019	104	0.90 981	9.99 674	59	105	104	103	102
2	9.08 795	102	9.09 128	104	0.90 877	9.99 672	58	1	1.8	1.7	1.7
3	9.08 897	102	9.09 227	108	0.90 778	9.99 670	57	2	8.5	8.5	8.4
4	9.08 999	102	9.09 330	104	0.90 670	9.99 669	56	3	5.2	5.2	5.1
								4	6.0	6.9	6.8
5	9.09 101	101	9.09 434	108	0.90 566	9.99 667	55	5	3.8	8.7	8.6
6	9.09 202	102	9.09 537	108	0.90 463	9.99 666	54	6	10.5	10.4	10.8
7	9.09 304	101	9.09 640	102	0.90 360	9.99 664	53	7	12.2	12.1	12.0
8	9.09 405	101	9.09 742	108	0.90 258	9.99 663	52	8	14.0	13.9	13.7
9	9.09 506	100	9.09 845	102	0.90 155	9.99 661	51	9	15.8	15.6	15.4
								10	17.5	17.8	17.2
10	9.09 606	101	9.09 947	102	0.90 058	9.99 659	50	20	85.0	84.7	84.8
11	9.09 707	100	9.10 049	101	0.89 951	9.99 658	49	30	52.5	52.0	51.5
12	9.09 807	100	9.10 150	102	0.89 850	9.99 656	48	40	70.0	69.3	68.7
13	9.09 907	99	9.10 252	101	0.89 748	9.99 655	47	50	87.5	86.7	85.8
14	9.10 006	100	9.10 353	101	0.89 647	9.99 653	46				
								101	100	99	98
15	9.10 106	99	9.10 454	101	0.89 546	9.99 651	45	1	1.7	1.7	1.6
16	9.10 205	99	9.10 555	101	0.89 445	9.99 650	44	2	8.4	8.3	8.3
17	9.10 304	98	9.10 656	100	0.89 344	9.99 648	43	3	5.0	5.0	4.9
18	9.10 403	99	9.10 756	100	0.89 244	9.99 647	42	4	6.7	6.7	6.6
19	9.10 501	98	9.10 856	100	0.89 144	9.99 645	41	5	8.4	8.3	8.2
								6	10.1	10.0	9.9
20	9.10 599	98	9.10 956	100	0.89 044	9.99 643	40	7	11.8	11.7	11.6
21	9.10 697	98	9.11 056	99	0.88 944	9.99 642	39	8	13.5	13.3	13.2
22	9.10 795	98	9.11 155	99	0.88 845	9.99 640	38	9	15.2	15.0	14.8
23	9.10 893	97	9.11 254	99	0.88 746	9.99 638	37	10	16.8	16.7	16.5
24	9.10 990	97	9.11 353	99	0.88 647	9.99 637	36	20	33.7	33.3	33.0
								30	50.5	50.0	49.5
25	9.11 087	97	9.11 452	99	0.88 548	9.99 635	35	40	67.3	66.7	66.0
26	9.11 184	97	9.11 551	98	0.88 449	9.99 633	34	50	84.2	83.8	82.5
27	9.11 281	96	9.11 649	98	0.88 351	9.99 632	33				
28	9.11 377	97	9.11 747	98	0.88 253	9.99 630	32	97	96	95	94
29	9.11 474	96	9.11 845	98	0.88 155	9.99 629	31	1	1.6	1.6	1.6
								2	8.2	8.2	8.1
30	9.11 570	96	9.11 943	97	0.88 057	9.99 627	30	3	4.8	4.8	4.7
31	9.11 666	95	9.12 040	98	0.87 960	9.99 625	29	4	6.5	6.4	6.3
32	9.11 761	96	9.12 138	97	0.87 862	9.99 624	28	5	8.1	8.0	7.9
33	9.11 857	95	9.12 235	97	0.87 765	9.99 622	27	6	9.7	9.6	9.5
34	9.11 952	95	9.12 332	96	0.87 668	9.99 620	26	7	11.3	11.2	11.1
								8	12.9	12.8	12.7
35	9.12 047	95	9.12 429	97	0.87 572	9.99 618	25	9	14.6	14.4	14.2
36	9.12 143	94	9.12 525	96	0.87 475	9.99 617	24	10	16.2	16.0	15.8
37	9.12 238	95	9.12 621	96	0.87 379	9.99 615	23	20	32.3	32.0	31.7
38	9.12 331	94	9.12 717	96	0.87 283	9.99 613	22	30	48.5	48.0	47.5
39	9.12 425	94	9.12 813	96	0.87 187	9.99 612	21	40	64.7	64.0	63.3
								50	80.8	80.0	79.2
40	9.12 519	93	9.12 909	95	0.87 091	9.99 610	20				
41	9.12 612	94	9.13 004	95	0.86 996	9.99 608	19	98	92	91	90
42	9.12 706	93	9.13 099	95	0.86 901	9.99 607	18	1	1.6	1.5	1.5
43	9.12 799	98	9.13 194	95	0.86 806	9.99 605	17	2	8.1	8.1	8.0
44	9.12 892	98	9.13 289	95	0.86 711	9.99 603	16	3	4.6	4.6	4.5
								4	6.2	6.1	6.1
45	9.12 985	98	9.13 384	94	0.86 616	9.99 601	15	5	7.8	7.7	7.6
46	9.13 078	98	9.13 478	95	0.86 522	9.99 600	14	6	9.8	9.2	9.1
47	9.13 171	92	9.13 573	94	0.86 427	9.99 598	13	7	10.8	10.7	10.6
48	9.13 268	92	9.13 667	94	0.86 333	9.99 596	12	8	12.4	12.3	12.1
49	9.13 355	92	9.13 761	98	0.86 239	9.99 595	11	9	14.0	13.8	13.6
								10	15.5	15.3	15.2
50	9.13 447	92	9.13 854	94	0.86 146	9.99 593	10	20	31.0	30.7	30.3
51	9.13 539	91	9.13 948	98	0.86 052	9.99 591	9	30	46.5	46.0	45.5
52	9.13 630	92	9.14 041	98	0.85 959	9.99 589	8	40	62.0	61.3	60.7
53	9.13 722	91	9.14 134	98	0.85 866	9.99 588	7	50	77.5	76.7	75.8
54	9.13 813	91	9.14 227	98	0.85 773	9.99 586	6				
55	9.13 904	90	9.14 320	92	0.85 680	9.99 584	5				
56	9.13 994	91	9.14 413	92	0.85 588	9.99 582	4				
57	9.14 085	90	9.14 504	92	0.85 496	9.99 581	3				
58	9.14 175	91	9.14 597	91	0.85 408	9.99 579	2				
59	9.14 268	90	9.14 688	92	0.85 312	9.99 577	1				
60	9.14 356		9.14 780		0.85 220	9.99 575	0				
	L. Cos.	d.	L. Cotg.	c.d.	L. Tang.	L. Sin.		P. P.			

	L. Sin.	d.	L. Tang.	c.d.	L. Cotg.	L. Cos.		P. P.		
<b>0</b>	9.14 856	89	9.14 780	92	0.85 220	9.99 575	<b>60</b>	<b>92</b>	<b>91</b>	<b>90</b>
<b>1</b>	9.14 445	89	9.14 872	91	0.85 128	9.99 574	59	1 1.5	1.5	1.5
<b>2</b>	9.14 585	90	9.14 968	91	0.85 087	9.99 572	58	2 3.1	3.0	3.0
<b>3</b>	9.14 624	89	9.15 054	91	0.84 946	9.99 570	57	3 4.6	4.6	4.5
<b>4</b>	9.14 714	89	9.15 145	91	0.84 855	9.99 568	56	4 6.1	6.1	6.0
<b>5</b>	9.14 808	88	9.15 286	91	0.84 764	9.99 566	55	5 7.7	7.6	7.5
<b>6</b>	9.14 891	89	9.15 327	90	0.84 673	9.99 565	54	6 9.2	9.1	9.0
<b>7</b>	9.14 980	89	9.15 417	91	0.84 588	9.99 563	53	7 10.7	10.6	10.5
<b>8</b>	9.15 069	88	9.15 508	90	0.84 492	9.99 561	52	8 12.3	12.1	12.0
<b>9</b>	9.15 157	88	9.15 598	90	0.84 402	9.99 559	51	9 13.8	13.6	13.5
<b>10</b>	9.15 245	88	9.15 688	89	0.84 312	9.99 557	<b>50</b>	10 15.3	15.2	15.0
<b>11</b>	9.15 333	88	9.15 777	90	0.84 223	9.99 556	49	20 30.7	30.3	30.0
<b>12</b>	9.15 421	87	9.15 867	90	0.84 133	9.99 554	48	30 46.0	45.5	45.0
<b>13</b>	9.15 509	88	9.15 956	89	0.84 044	9.99 552	47	40 61.3	60.7	60.0
<b>14</b>	9.15 596	87	9.16 046	89	0.83 954	9.99 550	46	50 76.7	75.8	75.0
<b>15</b>	9.15 683	87	9.16 135	89	0.83 865	9.99 548	45	<b>89</b>	<b>88</b>	<b>87</b>
<b>16</b>	9.15 770	87	9.16 224	88	0.83 776	9.99 546	44	1 1.5	1.5	1.4
<b>17</b>	9.15 857	87	9.16 312	88	0.83 688	9.99 545	43	2 3.0	2.9	2.9
<b>18</b>	9.15 944	86	9.16 401	88	0.83 599	9.99 543	42	3 4.4	4.4	4.4
<b>19</b>	9.16 030	86	9.16 489	88	0.83 511	9.99 541	41	4 5.9	5.9	5.8
<b>20</b>	9.16 116	87	9.16 577	88	0.83 423	9.99 539	<b>40</b>	5 7.4	7.3	7.2
<b>21</b>	9.16 203	86	9.16 665	88	0.83 335	9.99 537	39	6 8.9	8.8	8.7
<b>22</b>	9.16 289	85	9.16 753	88	0.83 247	9.99 535	38	7 10.4	10.3	10.2
<b>23</b>	9.16 374	86	9.16 841	87	0.83 159	9.99 533	37	8 11.9	11.7	11.6
<b>24</b>	9.16 460	85	9.16 928	87	0.83 072	9.99 532	36	9 13.4	13.2	13.0
<b>25</b>	9.16 545	86	9.17 016	87	0.82 984	9.99 530	35	10 14.8	14.7	14.5
<b>26</b>	9.16 631	85	9.17 103	87	0.82 897	9.99 528	34	20 29.7	29.3	29.0
<b>27</b>	9.16 716	85	9.17 190	87	0.82 810	9.99 526	33	30 44.5	44.0	43.5
<b>28</b>	9.16 801	85	9.17 277	86	0.82 723	9.99 524	32	40 59.8	58.7	58.0
<b>29</b>	9.16 886	84	9.17 363	87	0.82 637	9.99 522	31	50 74.2	73.8	72.5
<b>30</b>	9.16 970	85	9.17 450	86	0.82 550	9.99 520	<b>30</b>	<b>86</b>	<b>85</b>	<b>84</b>
<b>31</b>	9.17 055	84	9.17 536	86	0.82 464	9.99 518	29	1 1.4	1.4	1.4
<b>32</b>	9.17 139	84	9.17 622	86	0.82 378	9.99 517	28	2 2.9	2.8	2.8
<b>33</b>	9.17 223	84	9.17 708	86	0.82 292	9.99 515	27	3 4.3	4.2	4.2
<b>34</b>	9.17 307	84	9.17 794	86	0.82 206	9.99 513	26	4 5.7	5.7	5.6
<b>35</b>	9.17 391	83	9.17 880	85	0.82 120	9.99 511	25	5 7.2	7.1	7.0
<b>36</b>	9.17 474	84	9.17 965	86	0.82 035	9.99 509	24	6 8.6	8.5	8.4
<b>37</b>	9.17 558	83	9.18 051	85	0.81 949	9.99 507	23	7 10.0	9.9	9.8
<b>38</b>	9.17 641	83	9.18 136	85	0.81 864	9.99 505	22	8 11.5	11.3	11.2
<b>39</b>	9.17 724	83	9.18 221	85	0.81 779	9.99 503	21	9 12.9	12.8	12.6
<b>40</b>	9.17 807	83	9.18 306	85	0.81 694	9.99 501	<b>20</b>	10 14.3	14.2	14.0
<b>41</b>	9.17 890	82	9.18 391	84	0.81 609	9.99 499	19	20 28.7	28.3	28.0
<b>42</b>	9.17 973	82	9.18 475	85	0.81 523	9.99 497	18	30 43.0	42.5	42.0
<b>43</b>	9.18 055	82	9.18 560	84	0.81 440	9.99 495	17	40 57.8	56.7	56.0
<b>44</b>	9.18 137	83	9.18 644	84	0.81 356	9.99 494	16	50 71.7	70.8	70.0
<b>45</b>	9.18 220	82	9.18 728	84	0.81 272	9.99 492	15	<b>83</b>	<b>82</b>	<b>81</b>
<b>46</b>	9.18 302	81	9.18 812	84	0.81 188	9.99 490	14	1 1.4	1.4	1.4
<b>47</b>	9.18 383	82	9.18 896	83	0.81 104	9.99 488	13	2 2.8	2.7	2.7
<b>48</b>	9.18 465	82	9.18 979	83	0.81 021	9.99 486	12	3 4.2	4.1	4.0
<b>49</b>	9.18 547	81	9.19 063	84	0.80 937	9.99 484	11	4 5.5	5.5	5.4
<b>50</b>	9.18 628	81	9.19 146	83	0.80 854	9.99 482	<b>10</b>	5 6.9	6.8	6.8
<b>51</b>	9.18 709	81	9.19 229	83	0.80 771	9.99 480	9	6 8.3	8.2	8.1
<b>52</b>	9.18 790	81	9.19 312	83	0.80 688	9.99 478	8	7 9.7	9.6	9.4
<b>53</b>	9.18 871	81	9.19 395	83	0.80 605	9.99 476	7	8 11.1	10.9	10.8
<b>54</b>	9.18 952	81	9.19 478	83	0.80 522	9.99 474	6	9 12.4	12.3	12.2
<b>55</b>	9.19 033	80	9.19 561	82	0.80 439	9.99 472	5	10 13.8	13.7	13.5
<b>56</b>	9.19 113	80	9.19 643	82	0.80 357	9.99 470	4	20 27.7	27.3	27.0
<b>57</b>	9.19 193	80	9.19 725	82	0.80 275	9.99 468	3	30 41.5	41.0	40.5
<b>58</b>	9.19 273	80	9.19 807	82	0.80 193	9.99 466	2	40 55.8	54.7	54.0
<b>59</b>	9.19 353	80	9.19 889	82	0.80 111	9.99 464	1	50 69.2	68.3	67.5
<b>60</b>	9.19 433		9.19 971		0.80 029	9.99 462	<b>0</b>			
	L. Cos.	d.	L. Cotg.	c.d.	L. Tang.	L. Sin.		P. P.		



9°

	L. Sin.	d.	L. Tang.	c.d.	L. Cotg.	L. Cos.		P. P.
0	9.19 488	80	9.19 971	82	0.80 029	9.99 462	60	
1	9.19 518	80	9.20 058	81	0.79 947	9.99 460	59	
2	9.19 592	79	9.20 184	82	0.79 866	9.99 458	58	
3	9.19 672	79	9.20 216	81	0.79 784	9.99 456	57	
4	9.19 751	79	9.20 297	81	0.79 708	9.99 454	56	
5	9.19 880	79	9.20 878	81	0.79 622	9.99 452	55	
6	9.19 909	79	9.20 459	81	0.79 541	9.99 450	54	
7	9.19 988	79	9.20 540	81	0.79 460	9.99 448	53	
8	9.20 067	78	9.20 621	80	0.79 379	9.99 446	52	
9	9.20 145	78	9.20 701	81	0.79 299	9.99 444	51	
10	9.20 228	79	9.20 782	80	0.79 218	9.99 442	50	
11	9.20 302	78	9.20 862	80	0.79 188	9.99 440	49	
12	9.20 380	78	9.20 943	80	0.79 056	9.99 438	48	
13	9.20 458	77	9.21 023	80	0.78 978	9.99 436	47	
14	9.20 535	78	9.21 103	80	0.78 898	9.99 434	46	
15	9.20 618	78	9.21 182	79	0.78 818	9.99 432	45	
16	9.20 691	77	9.21 261	80	0.78 739	9.99 429	44	
17	9.20 768	77	9.21 341	79	0.78 659	9.99 427	43	
18	9.20 845	77	9.21 420	79	0.78 580	9.99 425	42	
19	9.20 922	77	9.21 499	79	0.78 501	9.99 423	41	
20	9.20 999	77	9.21 578	79	0.78 422	9.99 421	40	
21	9.21 076	76	9.21 657	79	0.78 343	9.99 419	39	
22	9.21 158	76	9.21 736	78	0.78 264	9.99 417	38	
23	9.21 239	77	9.21 814	78	0.78 186	9.99 415	37	
24	9.21 306	76	9.21 893	78	0.78 107	9.99 413	36	
25	9.21 382	76	9.21 971	78	0.78 029	9.99 411	35	
26	9.21 458	76	9.22 049	78	0.77 951	9.99 409	34	
27	9.21 534	76	9.22 127	78	0.77 873	9.99 407	33	
28	9.21 610	75	9.22 205	78	0.77 795	9.99 404	32	
29	9.21 685	76	9.22 283	78	0.77 717	9.99 402	31	
30	9.21 761	75	9.22 361	78	0.77 639	9.99 400	30	
31	9.21 836	76	9.22 438	78	0.77 562	9.99 398	29	
32	9.21 912	75	9.22 516	77	0.77 484	9.99 396	28	
33	9.21 987	75	9.22 593	77	0.77 407	9.99 394	27	
34	9.22 062	75	9.22 670	77	0.77 330	9.99 392	26	
35	9.22 137	74	9.22 747	77	0.77 253	9.99 390	25	
36	9.22 211	75	9.22 824	77	0.77 176	9.99 388	24	
37	9.22 286	75	9.22 901	76	0.77 099	9.99 385	23	
38	9.22 361	74	9.22 977	76	0.77 023	9.99 383	22	
39	9.22 435	74	9.23 054	76	0.76 946	9.99 381	21	
40	9.22 509	74	9.23 130	76	0.76 870	9.99 379	20	
41	9.22 583	74	9.23 206	77	0.76 794	9.99 377	19	
42	9.22 657	74	9.23 283	76	0.76 717	9.99 375	18	
43	9.22 731	74	9.23 359	76	0.76 641	9.99 373	17	
44	9.22 805	74	9.23 435	75	0.76 565	9.99 370	16	
45	9.22 878	74	9.23 510	75	0.76 490	9.99 368	15	
46	9.22 952	73	9.23 586	75	0.76 414	9.99 366	14	
47	9.23 025	73	9.23 661	75	0.76 339	9.99 364	13	
48	9.23 098	73	9.23 737	75	0.76 263	9.99 362	12	
49	9.23 171	73	9.23 813	75	0.76 188	9.99 359	11	
50	9.23 244	73	9.23 887	75	0.76 113	9.99 357	10	
51	9.23 317	73	9.23 962	75	0.76 038	9.99 355	9	
52	9.23 390	72	9.24 037	75	0.75 963	9.99 353	8	
53	9.23 462	72	9.24 112	74	0.75 888	9.99 351	7	
54	9.23 535	72	9.24 186	74	0.75 814	9.99 348	6	
55	9.23 607	72	9.24 261	74	0.75 739	9.99 346	5	
56	9.23 679	72	9.24 335	74	0.75 665	9.99 344	4	
57	9.23 752	71	9.24 410	74	0.75 590	9.99 342	3	
58	9.23 823	71	9.24 484	74	0.75 516	9.99 340	2	
59	9.23 895	72	9.24 558	74	0.75 442	9.99 337	1	
60	9.23 967		9.24 632		0.75 368	9.99 335	0	
	L. Cos.	d.	L. Cotg.	c.d.	L. Tang.	L. Sin.		P. P.

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	L. Sin.	d.	L. Tang.	c.d.	L. Cotg.	L. Cos.	d.		P. P.
0	9.28 967	73	9.24 682	74	0.75 868	9.99 885	2	60	
1	9.24 089	71	9.24 706	73	0.75 294	9.99 888	2	59	
2	9.24 110	71	9.24 779	74	0.75 221	9.99 881	2	58	
3	9.24 181	71	9.24 858	73	0.75 147	9.99 828	2	57	
4	9.24 258	71	9.24 926	74	0.75 074	9.99 826	2	56	
5	9.24 324	71	9.25 000	73	0.75 000	9.99 824	2	55	1 1.2 1.2 1.2
6	9.24 395	71	9.25 078	73	0.74 927	9.99 822	2	54	2 2.5 2.4 2.4
7	9.24 466	70	9.25 146	73	0.74 854	9.99 819	2	53	3 8.7 8.6 8.6
8	9.24 536	70	9.25 219	73	0.74 781	9.99 817	2	52	4 4.9 4.9 4.8
9	9.24 607	70	9.25 292	73	0.74 708	9.99 815	2	51	
10	9.24 677	71	9.25 365	72	0.74 635	9.99 818	3	50	5 6.2 6.1 6.0
11	9.24 748	70	9.25 437	73	0.74 568	9.99 810	2	49	6 7.4 7.3 7.2
12	9.24 818	70	9.25 510	72	0.74 490	9.99 808	2	48	7 8.6 8.5 8.4
13	9.24 888	70	9.25 582	73	0.74 418	9.99 806	2	47	8 9.9 9.7 9.6
14	9.24 958	70	9.25 655	72	0.74 345	9.99 804	3	46	9 11.1 11.0 10.8
15	9.25 028	70	9.25 727	73	0.74 273	9.99 801	2	45	10 12.8 12.2 12.0
16	9.25 098	70	9.25 799	73	0.74 201	9.99 299	2	44	20 24.7 24.8 24.0
17	9.25 168	69	9.25 871	72	0.74 129	9.99 297	3	43	30 37.0 36.5 36.0
18	9.25 237	69	9.25 943	73	0.74 057	9.99 294	2	42	40 49.8 48.7 48.0
19	9.25 307	70	9.25 015	71	0.73 985	9.99 292	2	41	50 61.7 60.8 60.0
20	9.25 376	69	9.26 086	72	0.73 914	9.99 290	2	40	
21	9.25 445	69	9.26 158	71	0.73 842	9.99 288	3	39	
22	9.25 514	69	9.26 229	72	0.73 771	9.99 285	2	38	
23	9.25 583	69	9.26 301	71	0.73 699	9.99 283	2	37	71 70 69
24	9.25 652	69	9.26 372	71	0.73 628	9.99 281	2	36	
25	9.25 721	69	9.26 443	71	0.73 557	9.99 278	2	35	1 1.2 1.2 1.2
26	9.25 790	68	9.26 514	71	0.73 486	9.99 276	2	34	2 2.4 2.3 2.3
27	9.25 858	68	9.26 585	70	0.73 415	9.99 274	2	33	3 8.6 8.5 8.4
28	9.25 927	68	9.26 655	71	0.73 345	9.99 271	2	32	4 4.7 4.7 4.6
29	9.25 995	68	9.26 726	71	0.73 274	9.99 269	2	31	
30	9.26 068	68	9.26 797	70	0.73 203	9.99 267	3	30	5 5.9 5.8 5.8
31	9.26 131	68	9.26 867	70	0.73 132	9.99 264	2	29	6 7.1 7.0 6.9
32	9.26 199	68	9.26 937	71	0.73 063	9.99 262	2	28	7 8.3 8.2 8.0
33	9.26 267	68	9.27 008	70	0.72 992	9.99 260	2	27	8 9.5 9.2 9.2
34	9.26 335	68	9.27 078	70	0.72 922	9.99 257	2	26	9 10.6 10.5 10.4
35	9.26 408	67	9.27 148	70	0.72 852	9.99 255	3	25	10 11.8 11.7 11.5
36	9.26 470	68	9.27 218	70	0.72 782	9.99 252	2	24	20 22.7 22.8 22.0
37	9.26 538	67	9.27 288	69	0.72 712	9.99 250	2	23	30 35.5 35.0 34.5
38	9.26 605	67	9.27 357	70	0.72 643	9.99 248	2	22	40 47.8 46.7 46.0
39	9.26 672	67	9.27 427	69	0.72 573	9.99 245	3	21	50 59.2 58.8 57.5
40	9.26 739	67	9.27 496	70	0.72 504	9.99 243	2	20	
41	9.26 806	67	9.27 566	69	0.72 434	9.99 241	2	19	
42	9.26 873	67	9.27 635	69	0.72 365	9.99 238	2	18	
43	9.26 940	67	9.27 704	69	0.72 296	9.99 236	2	17	
44	9.27 007	66	9.27 773	69	0.72 227	9.99 233	2	16	
45	9.27 073	67	9.27 842	69	0.72 158	9.99 231	2	15	1 1.1 1.1 1.1
46	9.27 140	66	9.27 911	69	0.72 089	9.99 229	2	14	2 2.3 2.2 2.2
47	9.27 206	67	9.27 980	69	0.72 020	9.99 226	2	13	3 3.4 3.4 3.4
48	9.27 273	66	9.28 049	68	0.71 951	9.99 224	2	12	4 4.5 4.5 4.4
49	9.27 339	66	9.28 117	69	0.71 882	9.99 221	2	11	
50	9.27 405	66	9.28 186	68	0.71 814	9.99 219	2	10	5 5.7 5.6 5.5
51	9.27 471	66	9.28 254	69	0.71 746	9.99 217	2	9	6 6.8 6.7 6.6
52	9.27 537	65	9.28 322	68	0.71 677	9.99 214	2	8	7 7.9 7.8 7.7
53	9.27 602	64	9.28 391	68	0.71 609	9.99 212	2	7	8 9.1 8.9 8.8
54	9.27 668	65	9.28 459	68	0.71 541	9.99 209	2	6	9 10.2 10.0 9.9
55	9.27 734	65	9.28 527	68	0.71 473	9.99 207	2	5	10 11.3 11.2 11.0
56	9.27 799	65	9.28 595	67	0.71 405	9.99 204	2	4	20 22.7 22.8 22.0
57	9.27 864	65	9.28 662	68	0.71 338	9.99 202	2	3	30 34.0 33.5 33.0
58	9.27 930	65	9.28 730	68	0.71 270	9.99 200	2	2	40 45.8 44.7 44.0
59	9.27 995	65	9.28 798	67	0.71 202	9.99 197	2	1	50 56.7 55.8 55.0
60	9.28 060		9.28 865		0.71 135	9.99 195		0	
	L. Cos.	d.	L. Cotg.	c.d.	L. Tang.	L. Sin.	d.		P. P.

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	L. Stn.	d.	L. Tang.	c.d.	L. Cotg.	L. Cos.	d.		P. P.
0	9.28 060	65	9.28 865	68	0.71 185	9.99 195	8	60	
1	9.28 125	65	9.28 933	67	0.71 067	9.99 192	8	59	
2	9.28 190	65	9.29 000	67	0.71 000	9.99 190	8	58	
3	9.28 254	65	9.29 067	67	0.70 933	9.99 187	8	57	
4	9.28 319	65	9.29 134	67	0.70 866	9.99 185	8	56	65 64 63
5	9.28 384	64	9.29 201	67	0.70 799	9.99 182	8	55	1 1.1 1.1 1.0
6	9.28 448	64	9.29 268	67	0.70 732	9.99 180	8	54	2 2.2 2.1 2.1
7	9.28 512	65	9.29 335	67	0.70 665	9.99 177	8	53	3 3.2 3.2 3.2
8	9.28 577	65	9.29 402	66	0.70 598	9.99 175	8	52	4 4.3 4.3 4.2
9	9.28 641	64	9.29 468	67	0.70 532	9.99 172	8	51	
10	9.28 705	64	9.29 535	66	0.70 465	9.99 170	8	50	5 5.4 5.3 5.2
11	9.28 769	64	9.29 601	67	0.70 399	9.99 167	8	49	6 6.5 6.4 6.3
12	9.28 833	63	9.29 668	66	0.70 332	9.99 165	8	48	7 7.6 7.5 7.4
13	9.28 896	63	9.29 734	66	0.70 266	9.99 162	8	47	8 8.7 8.6 8.4
14	9.28 960	64	9.29 800	66	0.70 200	9.99 160	8	46	9 9.8 9.6 9.4
15	9.29 024	63	9.29 866	66	0.70 134	9.99 157	8	45	10 10.8 10.7 10.5
16	9.29 087	63	9.29 932	66	0.70 068	9.99 155	8	44	20 21.7 21.3 21.0
17	9.29 150	64	9.29 998	66	0.70 002	9.99 152	8	43	30 32.5 32.0 31.5
18	9.29 214	64	9.30 064	66	0.69 936	9.99 150	8	42	40 43.8 43.7 42.0
19	9.29 277	63	9.30 130	65	0.69 870	9.99 147	8	41	50 54.2 53.8 52.5
20	9.29 340	63	9.30 195	66	0.69 805	9.99 145	8	40	
21	9.29 403	63	9.30 261	65	0.69 739	9.99 142	8	39	
22	9.29 466	63	9.30 326	65	0.69 674	9.99 140	8	38	
23	9.29 529	62	9.30 391	65	0.69 609	9.99 137	8	37	
24	9.29 591	63	9.30 457	65	0.69 543	9.99 135	8	36	62 61 60
25	9.29 654	62	9.30 522	65	0.69 478	9.99 132	8	35	1 1.0 1.0 1.0
26	9.29 716	62	9.30 587	65	0.69 412	9.99 130	8	34	2 2.1 2.0 2.0
27	9.29 779	62	9.30 652	65	0.69 346	9.99 127	8	33	3 3.1 3.0 3.0
28	9.29 841	62	9.30 717	65	0.69 280	9.99 124	8	32	4 4.1 4.1 4.0
29	9.29 903	63	9.30 782	64	0.69 213	9.99 122	8	31	
30	9.29 966	62	9.30 846	65	0.69 147	9.99 119	8	30	5 5.2 5.1 5.0
31	9.30 028	62	9.30 911	64	0.69 081	9.99 117	8	29	6 6.2 6.1 6.0
32	9.30 090	61	9.30 975	65	0.69 015	9.99 114	8	28	7 7.2 7.1 7.0
33	9.30 151	61	9.31 040	65	0.68 950	9.99 112	8	27	8 8.2 8.1 8.0
34	9.30 213	62	9.31 104	64	0.68 884	9.99 109	8	26	9 9.2 9.2 9.0
35	9.30 275	61	9.31 168	65	0.68 818	9.99 106	8	25	10 10.2 10.2 10.0
36	9.30 338	62	9.31 232	64	0.68 752	9.99 104	8	24	20 20.7 20.3 20.0
37	9.30 398	61	9.31 297	64	0.68 686	9.99 101	8	23	30 31.0 30.5 30.0
38	9.30 459	62	9.31 361	64	0.68 620	9.99 099	8	22	40 41.8 40.7 40.0
39	9.30 521	61	9.31 425	64	0.68 554	9.99 096	8	21	50 51.7 50.8 50.0
40	9.30 582	61	9.31 489	63	0.68 488	9.99 093	8	20	
41	9.30 643	61	9.31 552	64	0.68 422	9.99 091	8	19	
42	9.30 704	61	9.31 616	63	0.68 356	9.99 088	8	18	
43	9.30 765	61	9.31 679	64	0.68 290	9.99 086	8	17	59 3 2
44	9.30 826	61	9.31 743	63	0.68 224	9.99 083	8	16	
45	9.30 887	60	9.31 806	64	0.68 158	9.99 080	8	15	1 1.0 0.0 0.0
46	9.30 947	60	9.31 870	63	0.68 092	9.99 078	8	14	2 2.0 0.1 0.1
47	9.31 008	60	9.31 933	63	0.68 026	9.99 075	8	13	3 3.0 0.2 0.1
48	9.31 068	60	9.31 996	63	0.68 000	9.99 072	8	12	4 3.9 0.2 0.1
49	9.31 129	60	9.32 059	63	0.67 934	9.99 070	8	11	
50	9.31 189	61	9.32 122	63	0.67 868	9.99 067	8	10	5 4.9 0.2 0.2
51	9.31 250	60	9.32 185	63	0.67 802	9.99 064	8	9	6 5.9 0.3 0.3
52	9.31 310	60	9.32 248	63	0.67 736	9.99 062	8	8	7 6.9 0.4 0.3
53	9.31 370	60	9.32 311	62	0.67 670	9.99 059	8	7	8 7.9 0.4 0.3
54	9.31 430	60	9.32 374	63	0.67 604	9.99 056	8	6	9 8.9 0.4 0.3
55	9.31 490	59	9.32 436	62	0.67 538	9.99 054	8	5	10 9.8 0.5 0.3
56	9.31 549	60	9.32 498	63	0.67 472	9.99 051	8	4	20 19.7 1.0 0.7
57	9.31 609	60	9.32 561	62	0.67 406	9.99 048	8	3	30 29.5 1.5 1.0
58	9.31 669	59	9.32 623	62	0.67 340	9.99 046	8	2	40 39.8 2.0 1.3
59	9.31 728	60	9.32 685	62	0.67 274	9.99 043	8	1	50 49.2 2.5 1.7
60	9.31 788		9.32 747		0.67 208	9.99 040		0	
	L. Cos.	d.	L. Cotg.	c.d.	L. Tang.	L. Sin.	d.		P. P.

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	L. Sin.	d.	L. Tang.	c.d.	L. Cotg.	L. Cos.	d.		P. P.			
0	9.81 788	59	9.82 747	68	0.67 258	9.99 040	2	60				
1	9.81 847	59	9.82 810	62	0.67 190	9.99 088	3	59				
2	9.81 907	60	9.82 872	61	0.67 128	9.99 085	3	58				
3	9.81 966	59	9.82 933	62	0.67 067	9.99 082	2	57				
4	9.82 025	59	9.82 995	62	0.67 005	9.99 080	3	56				
5	9.82 084	59	9.83 057	62	0.66 948	9.99 027	3	55	1	1.0	1.0	1.0
6	9.82 148	59	9.83 119	61	0.66 881	9.99 024	2	54	2	2.1	2.1	2.0
7	9.82 202	59	9.83 180	62	0.66 820	9.99 022	3	53	3	3.2	3.1	3.0
8	9.82 261	58	9.83 242	61	0.66 758	9.99 019	3	52	4	4.3	4.1	4.1
9	9.82 319	59	9.83 308	62	0.66 697	9.99 016	3	51	5	5.3	5.2	5.1
10	9.82 378	59	9.83 365	61	0.66 635	9.99 018	2	50	6	6.3	6.2	6.1
11	9.82 437	58	9.83 426	61	0.66 574	9.99 011	3	49	7	7.4	7.2	7.1
12	9.82 495	58	9.83 487	61	0.66 513	9.99 008	3	48	8	8.4	8.3	8.1
13	9.82 553	59	9.83 548	61	0.66 452	9.99 005	3	47	9	9.4	9.3	9.2
14	9.82 612	58	9.83 609	61	0.66 391	9.99 002	2	46	10	10.5	10.3	10.2
15	9.82 670	58	9.83 670	61	0.66 330	9.99 000	3	45	20	21.0	20.7	20.3
16	9.82 728	58	9.83 731	61	0.66 269	9.98 997	3	44	30	31.5	31.0	30.5
17	9.82 786	58	9.83 792	61	0.66 208	9.98 994	3	43	40	42.0	41.3	40.7
18	9.82 844	58	9.83 858	60	0.66 147	9.98 991	2	42	50	52.5	51.7	50.8
19	9.82 902	58	9.83 918	61	0.66 087	9.98 989	3	41				
20	9.82 960	58	9.83 974	60	0.66 026	9.98 986	3	40				
21	9.83 018	57	9.84 034	61	0.65 966	9.98 988	3	39				
22	9.83 075	58	9.84 095	60	0.65 905	9.98 980	2	38				
23	9.83 133	57	9.84 155	60	0.65 845	9.98 978	3	37				
24	9.83 190	58	9.84 215	61	0.65 785	9.98 975	3	36				
25	9.83 248	57	9.84 276	60	0.65 724	9.98 972	3	35	1	1.0	1.0	1.0
26	9.83 305	57	9.84 336	60	0.65 664	9.98 969	2	34	2	2.0	2.0	1.9
27	9.83 362	58	9.84 396	60	0.65 604	9.98 967	3	33	3	3.0	3.0	2.9
28	9.83 420	57	9.84 456	60	0.65 544	9.98 964	3	32	4	4.0	3.9	3.9
29	9.83 477	57	9.84 516	60	0.65 484	9.98 961	3	31	5	5.0	4.9	4.8
30	9.83 534	57	9.84 576	59	0.65 424	9.98 958	3	30	6	6.0	5.9	5.8
31	9.83 591	56	9.84 635	60	0.65 365	9.98 955	2	29	7	7.0	6.9	6.8
32	9.83 647	57	9.84 695	60	0.65 305	9.98 953	3	28	8	8.0	7.9	7.7
33	9.83 704	57	9.84 755	59	0.65 245	9.98 950	3	27	9	9.0	8.8	8.7
34	9.83 761	57	9.84 814	60	0.65 186	9.98 947	3	26	10	10.0	9.8	9.7
35	9.83 818	56	9.84 874	59	0.65 126	9.98 944	3	25	20	20.0	19.7	19.3
36	9.83 874	57	9.84 933	59	0.65 067	9.98 941	3	24	30	30.0	29.5	29.0
37	9.83 931	57	9.84 992	59	0.65 008	9.98 938	2	23	40	40.0	39.3	38.7
38	9.83 987	56	9.85 051	60	0.64 949	9.98 936	3	22	50	50.0	49.2	48.3
39	9.84 043	57	9.85 111	59	0.64 889	9.98 933	3	21				
40	9.84 100	56	9.85 170	59	0.64 830	9.98 930	3	20				
41	9.84 156	56	9.85 229	59	0.64 771	9.98 927	3	19				
42	9.84 212	56	9.85 288	59	0.64 712	9.98 924	3	18				
43	9.84 268	56	9.85 347	58	0.64 653	9.98 921	3	17				
44	9.84 324	56	9.85 405	59	0.64 595	9.98 919	3	16				
45	9.84 380	56	9.85 464	59	0.64 536	9.98 916	3	15	1	1.0	0.9	0.9
46	9.84 436	55	9.85 523	58	0.64 477	9.98 913	3	14	2	1.9	1.9	1.8
47	9.84 491	56	9.85 581	59	0.64 419	9.98 910	3	13	3	2.8	2.8	2.8
48	9.84 547	55	9.85 640	58	0.64 360	9.98 907	3	12	4	3.8	3.7	3.7
49	9.84 603	56	9.85 698	59	0.64 302	9.98 904	3	11	5	4.8	4.7	4.6
50	9.84 658	55	9.85 757	58	0.64 243	9.98 901	3	10	6	5.7	5.6	5.5
51	9.84 713	56	9.85 815	58	0.64 185	9.98 898	2	9	7	6.6	6.5	6.4
52	9.84 769	55	9.85 873	58	0.64 127	9.98 896	3	8	8	7.6	7.5	7.3
53	9.84 824	55	9.85 931	58	0.64 069	9.98 893	3	7	9	8.6	8.4	8.2
54	9.84 879	55	9.85 989	58	0.64 011	9.98 890	3	6	10	9.5	9.3	9.2
55	9.84 934	55	9.86 047	58	0.63 953	9.98 887	3	5	20	19.0	18.7	18.3
56	9.84 989	55	9.86 105	58	0.63 895	9.98 884	3	4	30	28.5	28.0	27.5
57	9.85 044	55	9.86 163	58	0.63 837	9.98 881	3	3	40	38.0	37.3	36.7
58	9.85 099	55	9.86 221	58	0.63 779	9.98 878	3	2	50	47.5	46.7	45.8
59	9.85 154	55	9.86 279	57	0.63 721	9.98 875	3	1				
60	9.85 209	.	9.86 336		0.63 664	9.98 872		0				
	L. Cos.	d.	L. Cotg.	c.d.	L. Tang.	L. Sin.	d.		P. P.			

	L. Sin.	d.	L. Tang.	c.d.	L. Cotg.	L. Cos.	d.		P. P.
0	9.35 209	54	9.36 336		0.63 664	9.98 872		60	
1	9.35 263	55	9.36 394	58	0.63 606	9.98 869	3	59	
2	9.35 318	55	9.36 452	57	0.63 548	9.98 867	3	58	
3	9.35 373	54	9.36 509	57	0.63 491	9.98 864	3	57	
4	9.35 427	54	9.36 566	58	0.63 434	9.98 861	3	56	
5	9.35 481	55	9.36 624		0.63 376	9.98 858	3	55	
6	9.35 536	54	9.36 681	57	0.63 319	9.98 855	3	54	
7	9.35 590	54	9.36 738	57	0.63 262	9.98 852	3	53	
8	9.35 644	54	9.36 795	57	0.63 205	9.98 849	3	52	
9	9.35 698	54	9.36 852	57	0.63 148	9.98 846	3	51	
10	9.35 752	54	9.36 909		0.63 091	9.98 843	3	50	
11	9.35 806	54	9.36 966	57	0.63 034	9.98 840	3	49	
12	9.35 860	54	9.37 023	57	0.62 977	9.98 837	3	48	
13	9.35 914	54	9.37 080	57	0.62 920	9.98 834	3	47	
14	9.35 968	54	9.37 137	56	0.62 863	9.98 831	3	46	
15	9.36 022	58	9.37 193	57	0.62 807	9.98 828	3	45	
16	9.36 075	54	9.37 250	56	0.62 750	9.98 825	3	44	
17	9.36 129	53	9.37 306	57	0.62 694	9.98 822	3	43	
18	9.36 182	53	9.37 363	56	0.62 637	9.98 819	3	42	
19	9.36 236	58	9.37 419	57	0.62 581	9.98 816	3	41	
20	9.36 289	58	9.37 476	56	0.62 524	9.98 813	3	40	
21	9.36 342	58	9.37 532	56	0.62 468	9.98 810	3	39	
22	9.36 395	58	9.37 588	56	0.62 412	9.98 807	3	38	
23	9.36 449	54	9.37 644	56	0.62 356	9.98 804	3	37	
24	9.36 502	58	9.37 700	56	0.62 300	9.98 801	3	36	
25	9.36 555	58	9.37 756	56	0.62 244	9.98 798	3	35	
26	9.36 608	52	9.37 812	56	0.62 188	9.98 795	3	34	
27	9.36 660	58	9.37 868	56	0.62 132	9.98 792	3	33	
28	9.36 713	58	9.37 924	56	0.62 076	9.98 789	3	32	
29	9.36 766	58	9.37 980	55	0.62 020	9.98 786	3	31	
30	9.36 819	52	9.38 035	56	0.61 965	9.98 783	3	30	
31	9.36 871	58	9.38 091	56	0.61 909	9.98 780	3	29	
32	9.36 924	52	9.38 147	55	0.61 853	9.98 777	3	28	
33	9.36 976	52	9.38 202	55	0.61 798	9.98 774	3	27	
34	9.37 028	58	9.38 257	56	0.61 743	9.98 771	3	26	
35	9.37 081	52	9.38 313	55	0.61 687	9.98 768	3	25	
36	9.37 133	52	9.38 368	55	0.61 632	9.98 765	3	24	
37	9.37 185	52	9.38 423	56	0.61 577	9.98 762	3	23	
38	9.37 237	52	9.38 479	55	0.61 521	9.98 759	3	22	
39	9.37 289	52	9.38 534	55	0.61 466	9.98 756	3	21	
40	9.37 341	52	9.38 589	55	0.61 411	9.98 753	3	20	
41	9.37 393	52	9.38 644	55	0.61 356	9.98 750	3	19	
42	9.37 445	52	9.38 699	55	0.61 301	9.98 746	3	18	
43	9.37 497	52	9.38 754	54	0.61 246	9.98 743	3	17	
44	9.37 549	51	9.38 808	55	0.61 192	9.98 740	3	16	
45	9.37 601	52	9.38 863	55	0.61 137	9.98 737	3	15	
46	9.37 652	51	9.38 918	54	0.61 082	9.98 734	3	14	
47	9.37 703	52	9.38 972	55	0.61 028	9.98 731	3	13	
48	9.37 755	51	9.39 027	55	0.60 973	9.98 728	3	12	
49	9.37 806	52	9.39 082	54	0.60 918	9.98 725	3	11	
50	9.37 858	51	9.39 136	54	0.60 864	9.98 722	3	10	
51	9.37 909	51	9.39 190	55	0.60 810	9.98 719	3	9	
52	9.37 960	51	9.39 245	54	0.60 755	9.98 715	3	8	
53	9.38 011	51	9.39 299	54	0.60 701	9.98 712	3	7	
54	9.38 062	51	9.39 353	54	0.60 647	9.98 709	3	6	
55	9.38 113	51	9.39 407	54	0.60 593	9.98 706	3	5	
56	9.38 164	51	9.39 461	54	0.60 539	9.98 703	3	4	
57	9.38 215	51	9.39 515	54	0.60 485	9.98 700	3	3	
58	9.38 266	51	9.39 569	54	0.60 431	9.98 697	3	2	
59	9.38 317	51	9.39 623	54	0.60 377	9.98 694	3	1	
60	9.38 368		9.39 677		0.60 323	9.98 690		0	
	L. Cos.	d.	L. Cotg.	c.d.	L. Tang.	L. Sin.	d.		P. P.

	L. Sin.	d.	L. Tang.	e.d.	L. Cotg.	L. Cos.	d.		P. P.
0	9.38 868	50	9.39 677	54	0.60 323	9.98 690	3	60	
1	9.38 418	51	9.39 731	54	0.60 269	9.98 687	3	59	
2	9.38 469	50	9.39 785	53	0.60 215	9.98 684	3	58	
3	9.38 519	51	9.39 838	54	0.60 163	9.98 681	3	57	
4	9.38 570	50	9.39 892	53	0.60 108	9.98 678	3	56	
5	9.38 620	50	9.39 945	54	0.60 055	9.98 675	4	55	1 0.9 0.9 0.9
6	9.38 670	51	9.39 999	53	0.60 001	9.98 671	4	54	2 1.8 1.8 1.7
7	9.38 721	50	9.40 052	58	0.59 948	9.98 668	3	53	3 2.7 2.6 2.6
8	9.38 771	50	9.40 106	54	0.59 894	9.98 665	3	52	4 3.6 3.5 3.5
9	9.38 821	50	9.40 159	53	0.59 841	9.98 662	3	51	
10	9.38 871	50	9.40 212	54	0.59 788	9.98 659	3	50	5 4.5 4.4 4.3
11	9.38 921	50	9.40 266	53	0.59 734	9.98 656	4	49	6 5.4 5.3 5.2
12	9.38 971	50	9.40 319	58	0.59 681	9.98 652	4	48	7 6.3 6.2 6.1
13	9.39 021	50	9.40 372	53	0.59 628	9.98 649	3	47	8 7.2 7.1 6.9
14	9.39 071	50	9.40 425	58	0.59 575	9.98 646	3	46	9 8.1 8.0 7.8
15	9.39 121	49	9.40 478	53	0.59 522	9.98 643	3	45	10 9.0 8.8 8.7
16	9.39 170	50	9.40 531	58	0.59 469	9.98 640	4	44	20 18.0 17.7 17.8
17	9.39 220	50	9.40 584	52	0.59 416	9.98 636	3	43	30 27.0 26.5 26.0
18	9.39 270	49	9.40 636	58	0.59 364	9.98 633	3	42	40 36.0 35.3 34.7
19	9.39 319	50	9.40 689	53	0.59 311	9.98 630	3	41	50 45.0 44.2 43.8
20	9.39 369	49	9.40 742	58	0.59 258	9.98 627	4	40	
21	9.39 418	49	9.40 795	52	0.59 205	9.98 623	3	39	
22	9.39 467	49	9.40 847	58	0.59 153	9.98 620	3	38	
23	9.39 517	50	9.40 900	53	0.59 100	9.98 617	3	37	
24	9.39 566	49	9.40 952	58	0.59 048	9.98 614	4	36	51 50 49
25	9.39 615	49	9.41 005	52	0.58 995	9.98 610	3	35	1 0.8 0.8 0.8
26	9.39 664	49	9.41 057	58	0.58 943	9.98 607	3	34	2 1.7 1.7 1.6
27	9.39 713	49	9.41 109	52	0.58 891	9.98 604	3	33	3 2.6 2.5 2.4
28	9.39 762	49	9.41 161	58	0.58 839	9.98 601	3	32	4 3.4 3.3 3.3
29	9.39 811	49	9.41 214	52	0.58 786	9.98 597	3	31	
30	9.39 860	49	9.41 266	58	0.58 734	9.98 594	3	30	5 4.2 4.2 4.1
31	9.39 909	49	9.41 318	52	0.58 682	9.98 591	3	29	6 5.1 5.0 4.9
32	9.39 958	48	9.41 370	58	0.58 630	9.98 588	4	28	7 6.0 5.8 5.7
33	9.40 006	49	9.41 422	52	0.58 578	9.98 584	3	27	8 6.8 6.7 6.6
34	9.40 055	48	9.41 474	58	0.58 526	9.98 581	3	26	9 7.6 7.5 7.4
35	9.40 103	49	9.41 526	52	0.58 474	9.98 578	4	25	10 8.5 8.3 8.2
36	9.40 152	48	9.41 578	51	0.58 422	9.98 574	3	24	20 17.0 16.7 16.8
37	9.40 200	49	9.41 629	58	0.58 371	9.98 571	3	23	30 25.5 25.0 24.5
38	9.40 249	48	9.41 681	52	0.58 319	9.98 568	3	22	40 34.9 34.3 33.7
39	9.40 297	49	9.41 733	51	0.58 267	9.98 565	4	21	50 43.5 41.7 40.8
40	9.40 346	48	9.41 784	58	0.58 216	9.98 561	3	20	
41	9.40 394	48	9.41 836	51	0.58 164	9.98 558	3	19	
42	9.40 442	48	9.41 887	58	0.58 113	9.98 555	4	18	
43	9.40 490	48	9.41 939	51	0.58 061	9.98 551	3	17	43 42 41
44	9.40 538	48	9.41 990	51	0.58 010	9.98 548	3	16	
45	9.40 586	48	9.42 041	58	0.57 959	9.98 545	4	15	1 0.8 0.8 0.1 0.0
46	9.40 634	48	9.42 093	51	0.57 907	9.98 541	3	14	2 1.6 1.6 0.1 0.1
47	9.40 682	48	9.42 144	51	0.57 856	9.98 538	3	13	3 2.4 2.4 0.2 0.2
48	9.40 730	48	9.42 195	51	0.57 805	9.98 535	4	12	4 3.2 3.1 0.3 0.2
49	9.40 778	47	9.42 246	51	0.57 754	9.98 531	3	11	
50	9.40 825	48	9.42 297	51	0.57 703	9.98 528	3	10	5 4.0 3.9 0.3 0.2
51	9.40 873	48	9.42 348	51	0.57 652	9.98 525	4	9	6 4.8 4.7 0.4 0.3
52	9.40 921	47	9.42 399	51	0.57 601	9.98 521	3	8	7 5.6 5.5 0.5 0.4
53	9.40 969	48	9.42 450	51	0.57 550	9.98 518	3	7	8 6.4 6.3 0.6 0.4
54	9.41 016	47	9.42 501	51	0.57 499	9.98 515	4	6	9 7.2 7.0 0.6 0.4
55	9.41 063	48	9.42 552	51	0.57 448	9.98 511	3	5	10 8.0 7.8 0.7 0.5
56	9.41 111	47	9.42 603	50	0.57 397	9.98 508	3	4	20 16.0 15.7 1.8 1.0
57	9.41 159	47	9.42 653	51	0.57 347	9.98 505	3	3	30 24.0 23.5 2.0 1.5
58	9.41 205	47	9.42 704	51	0.57 296	9.98 501	3	2	40 32.0 31.3 2.7 2.0
59	9.41 252	48	9.42 755	50	0.57 245	9.98 498	4	1	50 40.0 39.2 2.8 2.5
60	9.41 300		9.42 805		0.57 195	9.98 494		0	
	L. Cos.	d.	L. Cotg.	e.d.	L. Tang.	L. Sin.	d.		P. P.

15°

	L. Sin.	d.	L. Tang.	e.d.	L. Cotg.	L. Cos.	d.		P. P.
0	9.41 800	47	9.42 805	51	0.57 195	9.98 494	3	60	
1	9.41 847	47	9.42 856	50	0.57 144	9.98 491	3	59	
2	9.41 894	47	9.42 906	51	0.57 094	9.98 488	3	58	
3	9.41 441	47	9.42 957	50	0.57 043	9.98 484	4	57	
4	9.41 488	47	9.48 007	50	0.56 993	9.98 481	4	56	
5	9.41 535	47	9.48 057	51	0.56 948	9.98 477	3	55	1 0.8 0.8 0.8
6	9.41 582	47	9.48 108	50	0.56 892	9.98 474	3	54	2 1.7 1.7 1.6
7	9.41 628	46	9.48 158	50	0.56 842	9.98 471	3	53	3 2.6 2.6 2.4
8	9.41 675	47	9.48 208	50	0.56 792	9.98 467	4	52	4 3.4 3.3 3.3
9	9.41 722	46	9.48 258	50	0.56 742	9.98 464	4	51	
10	9.41 768	47	9.48 308	50	0.56 692	9.98 460	3	50	5 4.2 4.2 4.1
11	9.41 815	47	9.48 358	50	0.56 642	9.98 457	4	49	6 5.1 5.0 4.9
12	9.41 861	46	9.48 408	50	0.56 592	9.98 458	3	48	7 6.0 5.8 5.7
13	9.41 908	46	9.48 458	50	0.56 542	9.98 450	3	47	8 6.8 6.7 6.5
14	9.41 954	47	9.48 508	50	0.56 492	9.98 447	4	46	9 7.6 7.5 7.4
15	9.42 001	46	9.48 558	49	0.56 442	9.98 443	3	45	10 8.5 8.3 8.2
16	9.42 047	46	9.48 607	50	0.56 393	9.98 440	4	44	20 17.0 16.7 16.3
17	9.42 093	46	9.48 657	50	0.56 343	9.98 436	3	43	30 25.5 25.0 24.5
18	9.42 140	46	9.48 707	49	0.56 293	9.98 433	4	42	40 34.0 33.8 32.7
19	9.42 186	46	9.48 756	50	0.56 244	9.98 429	3	41	50 42.5 41.7 40.8
20	9.42 232	46	9.48 806	49	0.56 194	9.98 426	4	40	
21	9.42 278	46	9.48 855	50	0.56 145	9.98 422	3	39	
22	9.42 324	46	9.48 905	49	0.56 095	9.98 419	4	38	
23	9.42 370	46	9.48 954	50	0.56 046	9.98 415	3	37	
24	9.42 416	45	9.44 004	49	0.55 996	9.98 412	4	36	48 47 46
25	9.42 461	46	9.44 058	49	0.55 947	9.98 409	3	35	1 0.8 0.8 0.8
26	9.42 507	46	9.44 102	49	0.55 898	9.98 405	4	34	2 1.6 1.6 1.5
27	9.42 553	46	9.44 151	50	0.55 849	9.98 402	3	33	3 2.4 2.4 2.3
28	9.42 599	45	9.44 201	49	0.55 799	9.98 398	4	32	4 3.2 3.1 3.1
29	9.42 644	46	9.44 250	49	0.55 750	9.98 395	3	31	
30	9.42 690	45	9.44 299	49	0.55 701	9.98 391	4	30	5 4.0 3.9 3.8
31	9.42 735	46	9.44 348	49	0.55 652	9.98 388	3	29	6 4.8 4.7 4.6
32	9.42 781	45	9.44 397	49	0.55 603	9.98 384	4	28	7 5.6 5.5 5.4
33	9.42 826	46	9.44 446	49	0.55 554	9.98 381	3	27	8 6.4 6.3 6.1
34	9.42 872	45	9.44 495	49	0.55 505	9.98 377	4	26	9 7.2 7.0 6.9
35	9.42 917	45	9.44 544	48	0.55 456	9.98 373	3	25	10 8.0 7.8 7.7
36	9.42 962	46	9.44 592	49	0.55 408	9.98 370	4	24	20 16.0 15.7 15.3
37	9.43 008	45	9.44 641	49	0.55 359	9.98 366	3	23	30 24.0 23.5 23.0
38	9.43 053	45	9.44 690	48	0.55 310	9.98 363	4	22	40 32.0 31.8 30.7
39	9.43 098	45	9.44 738	49	0.55 262	9.98 359	3	21	50 40.0 39.3 38.3
40	9.43 143	45	9.44 787	49	0.55 213	9.98 356	4	20	
41	9.43 188	45	9.44 836	48	0.55 164	9.98 352	3	19	
42	9.43 233	45	9.44 884	49	0.55 116	9.98 349	4	18	
43	9.43 278	45	9.44 933	48	0.55 067	9.98 345	3	17	45 44 4 3
44	9.43 323	44	9.44 981	48	0.55 019	9.98 342	4	16	1 0.8 0.7 0.1 0.0
45	9.43 367	45	9.45 029	49	0.54 971	9.98 338	3	15	2 1.5 1.5 0.1 0.1
46	9.43 412	45	9.45 078	48	0.54 922	9.98 334	4	14	3 2.2 2.2 0.2 0.2
47	9.43 457	45	9.45 126	48	0.54 874	9.98 331	3	13	4 3.0 2.9 0.3 0.2
48	9.43 502	44	9.45 174	48	0.54 826	9.98 327	4	12	
49	9.43 546	45	9.45 222	49	0.54 778	9.98 324	3	11	5 3.8 3.7 0.3 0.2
50	9.43 591	44	9.45 271	48	0.54 729	9.98 320	4	10	6 4.5 4.4 0.4 0.3
51	9.43 635	45	9.45 319	48	0.54 681	9.98 317	3	9	7 5.2 5.1 0.5 0.4
52	9.43 680	44	9.45 367	48	0.54 633	9.98 313	4	8	8 6.0 5.9 0.5 0.4
53	9.43 724	45	9.45 415	48	0.54 585	9.98 309	3	7	9 6.8 6.6 0.6 0.4
54	9.43 769	44	9.45 463	48	0.54 537	9.98 306	4	6	
55	9.43 813	44	9.45 511	48	0.54 489	9.98 302	3	5	10 7.5 7.3 0.7 0.5
56	9.43 857	44	9.45 559	47	0.54 441	9.98 299	4	4	20 15.0 14.7 1.3 1.0
57	9.43 901	45	9.45 606	48	0.54 394	9.98 295	3	3	30 22.5 22.0 2.0 1.5
58	9.43 946	44	9.45 654	48	0.54 346	9.98 291	4	2	40 30.0 29.3 2.7 2.0
59	9.43 990	44	9.45 702	48	0.54 298	9.98 288	3	1	50 37.5 36.7 3.3 2.5
60	9.44 034		9.45 750		0.54 250	9.98 284	4	0	
	L. Cos.	d.	L. Cotg.	e.d.	L. Tang.	L. Sin.	d.		P. P.

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	L. Sin.	d.	L. Tang.	c.d.	L. Cotg.	L. Cos.	d.		P. P.
0	9.44 084	44	9.45 750	47	0.54 250	9.98 284	8	60	
1	9.44 078	44	9.45 797	48	0.54 208	9.98 281	4	59	
2	9.44 122	44	9.45 845	47	0.54 155	9.98 277	4	58	
3	9.44 166	44	9.45 892	47	0.54 108	9.98 278	8	57	
4	9.44 210	44	9.45 940	48	0.54 060	9.98 270	4	56	48 47 46
5	9.44 253	44	9.45 987	48	0.54 018	9.98 266	4	55	1 0.8 0.8 0.8
6	9.44 297	44	9.46 085	47	0.53 965	9.98 262	8	54	2 1.6 1.6 1.5
7	9.44 341	44	9.46 082	48	0.53 918	9.98 259	4	53	3 2.4 2.4 2.3
8	9.44 385	48	9.46 180	47	0.53 870	9.98 255	4	52	4 3.2 3.1 3.1
9	9.44 428	44	9.46 177	47	0.53 823	9.98 251	8	51	5 4.0 3.9 3.8
10	9.44 472	44	9.46 224	47	0.53 776	9.98 248	4	50	6 4.8 4.7 4.6
11	9.44 516	48	9.46 271	48	0.53 729	9.98 244	4	49	7 5.6 5.5 5.4
12	9.44 559	48	9.46 319	47	0.53 681	9.98 240	8	48	8 6.4 6.3 6.1
13	9.44 602	44	9.46 366	47	0.53 634	9.98 237	4	47	9 7.2 7.0 6.9
14	9.44 646	48	9.46 413	47	0.53 587	9.98 233	4	46	10 8.0 7.8 7.7
15	9.44 689	44	9.46 460	47	0.53 540	9.98 229	8	45	20 16.0 15.7 15.8
16	9.44 733	48	9.46 507	47	0.53 493	9.98 226	4	44	30 24.0 23.5 23.0
17	9.44 776	48	9.46 554	47	0.53 446	9.98 222	4	43	40 32.0 31.8 30.7
18	9.44 819	48	9.46 601	47	0.53 399	9.98 218	8	42	50 40.0 39.2 38.8
19	9.44 862	48	9.46 648	46	0.53 352	9.98 215	4	41	
20	9.44 905	48	9.46 694	47	0.53 306	9.98 211	4	40	
21	9.44 948	44	9.46 741	47	0.53 259	9.98 207	8	39	
22	9.44 992	48	9.46 788	47	0.53 212	9.98 204	4	38	
23	9.45 035	42	9.46 835	47	0.53 165	9.98 200	4	37	
24	9.45 077	48	9.46 881	46	0.53 119	9.98 196	4	36	45 44 43
25	9.45 120	48	9.46 928	47	0.53 072	9.98 192	8	35	1 0.8 0.7 0.7
26	9.45 163	48	9.46 975	47	0.53 025	9.98 189	4	34	2 1.5 1.5 1.4
27	9.45 206	48	9.47 021	46	0.52 979	9.98 185	4	33	3 2.2 2.2 2.2
28	9.45 249	48	9.47 068	46	0.52 932	9.98 181	4	32	4 3.0 2.9 2.9
29	9.45 292	42	9.47 114	46	0.52 886	9.98 177	8	31	
30	9.45 334	48	9.47 160	47	0.52 840	9.98 174	4	30	5 3.8 3.7 3.6
31	9.45 377	42	9.47 207	47	0.52 793	9.98 170	4	29	6 4.5 4.4 4.3
32	9.45 419	48	9.47 253	46	0.52 747	9.98 166	4	28	7 5.2 5.1 5.0
33	9.45 462	42	9.47 299	47	0.52 701	9.98 162	8	27	8 6.0 5.9 5.7
34	9.45 504	48	9.47 346	46	0.52 654	9.98 159	4	26	9 6.8 6.6 6.4
35	9.45 547	42	9.47 392	46	0.52 608	9.98 155	4	25	10 7.5 7.3 7.2
36	9.45 589	48	9.47 438	46	0.52 562	9.98 151	4	24	20 15.0 14.7 14.8
37	9.45 632	42	9.47 484	46	0.52 516	9.98 147	8	23	30 22.5 22.0 21.5
38	9.45 674	42	9.47 530	46	0.52 470	9.98 144	4	22	40 30.0 29.8 28.7
39	9.45 716	42	9.47 576	46	0.52 424	9.98 140	4	21	50 37.5 36.7 35.8
40	9.45 758	48	9.47 622	46	0.52 378	9.98 136	4	20	
41	9.45 801	42	9.47 668	46	0.52 332	9.98 132	8	19	
42	9.45 843	42	9.47 714	46	0.52 286	9.98 129	4	18	
43	9.45 885	42	9.47 760	46	0.52 240	9.98 125	4	17	42 41 4 3
44	9.45 927	42	9.47 806	46	0.52 194	9.98 121	4	16	1 0.7 0.7 0.7
45	9.45 969	42	9.47 852	45	0.52 148	9.98 117	4	15	2 1.4 1.4 1.4
46	9.46 011	42	9.47 897	46	0.52 102	9.98 113	8	14	3 2.1 2.0 2.0
47	9.46 053	42	9.47 943	46	0.52 057	9.98 110	4	13	4 2.8 2.7 2.7
48	9.46 095	41	9.47 989	46	0.52 011	9.98 106	4	12	
49	9.46 136	42	9.48 035	45	0.51 965	9.98 102	4	11	5 3.5 3.4 3.4
50	9.46 178	42	9.48 080	46	0.51 920	9.98 098	4	10	6 4.2 4.1 4.0
51	9.46 220	42	9.48 126	45	0.51 874	9.98 094	8	9	7 4.9 4.8 4.8
52	9.46 262	41	9.48 171	45	0.51 829	9.98 090	4	8	8 5.6 5.5 5.5
53	9.46 303	42	9.48 217	45	0.51 783	9.98 087	4	7	9 6.3 6.2 6.2
54	9.46 345	41	9.48 262	45	0.51 738	9.98 083	4	6	10 7.0 6.8 6.8
55	9.46 386	42	9.48 307	46	0.51 693	9.98 079	4	5	20 14.0 13.7 13.1
56	9.46 423	41	9.48 353	45	0.51 647	9.98 075	4	4	30 21.0 20.5 20.1
57	9.46 469	42	9.48 398	45	0.51 602	9.98 071	4	3	40 28.0 27.8 27.2
58	9.46 511	41	9.48 443	45	0.51 557	9.98 067	4	2	50 35.0 34.2 33.5
59	9.46 552	42	9.48 489	45	0.51 511	9.98 063	8	1	
60	9.46 594		9.48 534		0.51 466	9.98 060		0	
	L. Cos.	d.	L. Cotg.	c.d.	L. Tang.	L. Sin.	d.		P. P.



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	L. Sin.	d.	L. Tang.	c.d.	L. Cotg.	L. Cos.	d.		P. P.
0	9.46 584	41	9.48 584	45	0.51 466	9.98 060	4	60	
1	9.46 685	41	9.48 579	45	0.51 421	9.98 056	4	59	
2	9.46 676	41	9.48 624	45	0.51 876	9.98 052	4	58	
3	9.46 717	41	9.48 669	45	0.51 831	9.98 048	4	57	
4	9.46 758	42	9.48 714	45	0.51 286	9.98 044	4	56	45 44 43
5	9.46 800	41	9.48 759	45	0.51 241	9.98 040	4	55	1 0,8 0,7 0,7
6	9.46 841	41	9.48 804	45	0.51 196	9.98 036	4	54	2 1,5 1,5 1,4
7	9.46 882	41	9.48 849	45	0.51 151	9.98 032	4	53	3 2,2 2,2 2,2
8	9.46 923	41	9.48 894	45	0.51 106	9.98 029	4	52	4 3,0 2,9 2,9
9	9.46 964	41	9.48 889	45	0.51 061	9.98 025	4	51	
10	9.47 005	40	9.48 984	45	0.51 016	9.98 021	4	50	5 3,8 3,7 3,6
11	9.47 045	40	9.49 029	44	0.50 971	9.98 017	4	49	6 4,5 4,4 4,3
12	9.47 086	41	9.49 078	44	0.50 927	9.98 013	4	48	7 5,2 5,1 5,0
13	9.47 127	41	9.49 118	45	0.50 882	9.98 009	4	47	8 6,0 5,9 5,7
14	9.47 168	41	9.49 163	44	0.50 837	9.98 005	4	46	9 6,8 6,6 6,4
15	9.47 209	40	9.49 207	45	0.50 798	9.98 001	4	45	10 7,5 7,3 7,2
16	9.47 249	40	9.49 252	44	0.50 748	9.97 997	4	44	20 15,0 14,7 14,8
17	9.47 290	41	9.49 296	45	0.50 704	9.97 993	4	43	30 22,5 22,0 21,5
18	9.47 330	40	9.49 341	44	0.50 659	9.97 989	4	42	40 30,0 29,8 28,7
19	9.47 371	40	9.49 385	45	0.50 615	9.97 986	4	41	50 37,5 36,7 35,8
20	9.47 411	41	9.49 480	44	0.50 570	9.97 982	4	40	
21	9.47 452	40	9.49 474	45	0.50 526	9.97 978	4	39	
22	9.47 492	41	9.49 519	44	0.50 481	9.97 974	4	38	
23	9.47 533	41	9.49 568	44	0.50 437	9.97 970	4	37	
24	9.47 573	40	9.49 607	45	0.50 393	9.97 966	4	36	42 41 40
25	9.47 613	41	9.49 652	44	0.50 348	9.97 962	4	35	1 0,7 0,7 0,7
26	9.47 654	40	9.49 696	44	0.50 304	9.97 958	4	34	2 1,4 1,4 1,3
27	9.47 694	40	9.49 740	44	0.50 260	9.97 954	4	33	3 2,1 2,0 2,0
28	9.47 734	40	9.49 784	44	0.50 216	9.97 950	4	32	4 2,8 2,7 2,7
29	9.47 774	40	9.49 828	44	0.50 172	9.97 946	4	31	
30	9.47 814	40	9.49 872	44	0.50 128	9.97 942	4	30	5 3,5 3,4 3,3
31	9.47 854	40	9.49 916	44	0.50 084	9.97 938	4	29	6 4,2 4,1 4,0
32	9.47 894	40	9.49 960	44	0.50 040	9.97 934	4	28	7 4,9 4,8 4,7
33	9.47 934	40	9.50 004	44	0.49 996	9.97 930	4	27	8 5,6 5,5 5,3
34	9.47 974	40	9.50 048	44	0.49 952	9.97 926	4	26	9 6,3 6,2 6,0
35	9.48 014	40	9.50 092	44	0.49 908	9.97 922	4	25	10 7,0 6,8 6,7
36	9.48 054	40	9.50 136	44	0.49 864	9.97 918	4	24	20 14,0 13,7 13,8
37	9.48 094	39	9.50 180	43	0.49 820	9.97 914	4	23	30 21,0 20,5 20,0
38	9.48 133	39	9.50 223	44	0.49 777	9.97 910	4	22	40 28,0 27,8 26,7
39	9.48 173	40	9.50 267	44	0.49 733	9.97 906	4	21	50 35,0 34,2 33,8
40	9.48 213	39	9.50 311	44	0.49 689	9.97 902	4	20	
41	9.48 252	40	9.50 355	43	0.49 645	9.97 898	4	19	
42	9.48 292	40	9.50 398	43	0.49 602	9.97 894	4	18	
43	9.48 332	39	9.50 442	43	0.49 558	9.97 890	4	17	39 5 4 3
44	9.48 371	40	9.50 485	44	0.49 515	9.97 886	4	16	
45	9.48 411	39	9.50 529	43	0.49 471	9.97 882	4	15	1 0,6 0,1 0,1 0,0
46	9.48 450	40	9.50 572	44	0.49 428	9.97 878	4	14	2 1,3 0,3 0,1 0,1
47	9.48 490	39	9.50 616	43	0.49 384	9.97 874	4	13	3 2,0 0,2 0,2 0,2
48	9.48 529	39	9.50 659	44	0.49 341	9.97 870	4	12	4 2,6 0,3 0,3 0,2
49	9.48 568	39	9.50 703	43	0.49 297	9.97 866	5	11	
50	9.48 607	40	9.50 746	43	0.49 254	9.97 861	4	10	5 3,2 0,4 0,3 0,2
51	9.48 647	39	9.50 789	44	0.49 211	9.97 857	4	9	6 3,9 0,5 0,4 0,3
52	9.48 686	39	9.50 833	43	0.49 167	9.97 853	4	8	7 4,6 0,6 0,5 0,4
53	9.48 725	39	9.50 876	43	0.49 124	9.97 849	4	7	8 5,2 0,7 0,5 0,4
54	9.48 764	39	9.50 919	43	0.49 081	9.97 845	4	6	9 5,8 0,8 0,6 0,4
55	9.48 803	39	9.50 962	43	0.48 038	9.97 841	4	5	10 6,5 0,8 0,7 0,5
56	9.48 842	39	9.51 005	43	0.48 995	9.97 837	4	4	20 13,0 1,7 1,3 1,0
57	9.48 881	39	9.51 048	44	0.48 952	9.97 833	4	3	30 19,5 2,5 2,0 1,5
58	9.48 920	39	9.51 092	43	0.48 908	9.97 829	4	2	40 26,0 3,3 2,7 2,0
59	9.48 959	39	9.51 135	43	0.48 865	9.97 825	4	1	50 32,5 4,2 3,8 2,5
60	9.48 998		9.51 178		0.48 822	9.97 821		0	
	L. Cos.	d.	L. Cotg.	c.d.	L. Tang.	L. Sin.	d.		P. P.

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	L. Sin.	d.	L. Tang.	c.d.	L. Cotg.	L. Cos.	d.		P. P.
0	9.48 998	39	9.51 178	43	0.48 822	9.97 821	4	60	
1	9.49 087	39	9.51 221	43	0.48 779	9.97 817	5	59	
2	9.49 076	39	9.51 264	42	0.48 736	9.97 812	6	58	
3	9.49 115	38	9.51 306	42	0.48 694	9.97 808	7	57	
4	9.49 153	38	9.51 349	43	0.48 651	9.97 804	8	56	43 43 41
5	9.49 192	39	9.51 392	43	0.48 608	9.97 800	9	55	1 0.7 0.7 0.7
6	9.49 231	38	9.51 435	43	0.48 565	9.97 796	10	54	2 1.4 1.4 1.4
7	9.49 269	38	9.51 478	42	0.48 522	9.97 792	11	53	3 2.2 2.1 2.0
8	9.49 308	39	9.51 520	43	0.48 480	9.97 788	12	52	4 2.9 2.8 2.7
9	9.49 347	38	9.51 563	43	0.48 437	9.97 784	13	51	
10	9.49 385	39	9.51 606	42	0.48 394	9.97 779	14	50	5 3.6 3.5 3.4
11	9.49 424	38	9.51 648	43	0.48 352	9.97 775	15	49	6 4.8 4.2 4.1
12	9.49 462	38	9.51 691	43	0.48 309	9.97 771	16	48	7 5.0 4.9 4.8
13	9.49 500	39	9.51 734	42	0.48 266	9.97 767	17	47	8 5.7 5.6 5.5
14	9.49 539	38	9.51 776	43	0.48 224	9.97 763	18	46	9 6.4 6.3 6.2
15	9.49 577	38	9.51 819	42	0.48 181	9.97 759	19	45	10 7.2 7.0 6.8
16	9.49 615	39	9.51 861	42	0.48 139	9.97 754	20	44	20 14.8 14.0 13.7
17	9.49 654	38	9.51 903	43	0.48 097	9.97 750	21	43	30 21.5 21.0 20.5
18	9.49 692	38	9.51 946	42	0.48 054	9.97 746	22	42	40 28.7 28.0 27.3
19	9.49 730	38	9.51 988	43	0.48 012	9.97 742	23	41	50 35.8 35.0 34.3
20	9.49 768	38	9.52 031	42	0.47 969	9.97 738	24	40	
21	9.49 806	38	9.52 073	42	0.47 927	9.97 734	25	39	
22	9.49 844	38	9.52 115	42	0.47 885	9.97 729	26	38	
23	9.49 882	38	9.52 157	43	0.47 843	9.97 725	27	37	
24	9.49 920	38	9.52 200	42	0.47 800	9.97 721	28	36	39 38 37
25	9.49 958	38	9.52 242	42	0.47 758	9.97 717	29	35	1 0.6 0.6 0.6
26	9.49 996	38	9.52 284	42	0.47 716	9.97 713	30	34	2 1.3 1.3 1.2
27	9.50 034	38	9.52 326	42	0.47 674	9.97 708	31	33	3 2.0 1.9 1.8
28	9.50 072	38	9.52 368	42	0.47 632	9.97 704	32	32	4 2.6 2.5 2.5
29	9.50 110	38	9.52 410	42	0.47 590	9.97 700	33	31	
30	9.50 148	37	9.52 452	42	0.47 548	9.97 696	34	30	5 3.2 3.2 3.1
31	9.50 185	38	9.52 494	42	0.47 506	9.97 691	35	29	6 3.9 3.8 3.7
32	9.50 223	38	9.52 536	42	0.47 464	9.97 687	36	28	7 4.6 4.4 4.3
33	9.50 261	37	9.52 578	42	0.47 422	9.97 683	37	27	8 5.2 5.1 4.9
34	9.50 298	38	9.52 620	41	0.47 380	9.97 679	38	26	9 5.8 5.7 5.6
35	9.50 336	38	9.52 661	42	0.47 338	9.97 674	39	25	10 6.5 6.3 6.2
36	9.50 374	37	9.52 703	42	0.47 297	9.97 670	40	24	20 13.0 12.7 12.8
37	9.50 411	38	9.52 745	42	0.47 255	9.97 666	41	23	30 19.5 19.0 18.5
38	9.50 449	37	9.52 787	42	0.47 213	9.97 662	42	22	40 26.0 25.8 24.7
39	9.50 486	37	9.52 829	41	0.47 171	9.97 657	43	21	50 32.5 31.7 30.8
40	9.50 523	38	9.52 870	42	0.47 130	9.97 653	44	20	
41	9.50 561	37	9.52 912	41	0.47 088	9.97 649	45	19	
42	9.50 598	37	9.52 953	42	0.47 047	9.97 645	46	18	
43	9.50 635	38	9.52 995	42	0.47 005	9.97 640	47	17	26 5 4
44	9.50 673	37	9.53 037	41	0.46 963	9.97 636	48	16	1 0.6 0.1 0.1
45	9.50 710	37	9.53 078	42	0.46 922	9.97 632	49	15	2 1.2 0.2 0.1
46	9.50 747	37	9.53 120	41	0.46 880	9.97 628	50	14	3 1.8 0.2 0.2
47	9.50 784	37	9.53 161	41	0.46 839	9.97 623	1	13	4 2.4 0.3 0.3
48	9.50 821	37	9.53 202	42	0.46 798	9.97 619	2	12	
49	9.50 858	38	9.53 244	41	0.46 756	9.97 615	3	11	5 3.0 0.4 0.3
50	9.50 896	37	9.53 285	42	0.46 715	9.97 610	4	10	6 3.6 0.5 0.4
51	9.50 933	37	9.53 327	41	0.46 673	9.97 606	5	9	7 4.2 0.6 0.5
52	9.50 970	37	9.53 368	41	0.46 632	9.97 602	6	8	8 4.8 0.7 0.5
53	9.51 007	36	9.53 409	41	0.46 591	9.97 597	7	7	9 5.4 0.8 0.6
54	9.51 043	37	9.53 450	42	0.46 550	9.97 593	8	6	
55	9.51 080	37	9.53 492	41	0.46 508	9.97 589	9	5	10 6.0 0.8 0.7
56	9.51 117	37	9.53 533	41	0.46 467	9.97 584	10	4	20 12.0 1.7 1.8
57	9.51 154	37	9.53 574	41	0.46 426	9.97 580	11	3	30 18.0 2.5 2.0
58	9.51 191	36	9.53 615	41	0.46 385	9.97 576	12	2	40 24.0 3.3 2.7
59	9.51 227	37	9.53 656	41	0.46 344	9.97 571	13	1	50 30.0 4.2 3.8
60	9.51 264		9.53 697		0.46 303	9.97 567		0	
	L. Cos.	d.	L. Cotg.	c.d.	L. Tang.	L. Sin.	d.		P. P.

	L. Sin.	d.	L. Tang.	c.d.	L. Cotg.	L. Cos.	d.		P. P.
0	9.51 264	87	9.58 697	41	0.46 808	9.97 567	4	60	
1	9.51 801	87	9.58 788	41	0.46 262	9.97 568	5	59	
2	9.51 888	87	9.58 779	41	0.46 221	9.97 568	6	58	
3	9.51 874	86	9.58 890	41	0.46 180	9.97 564	4	57	
4	9.51 411	87	9.58 661	41	0.46 189	9.97 550	4	56	41 40 39
5	9.51 447	86	9.58 902	41	0.46 098	9.97 545	5	55	1 0.7 0.7 0.6
6	9.51 484	86	9.58 948	41	0.46 057	9.97 541	4	54	2 1.4 1.3 1.0
7	9.51 520	87	9.58 984	41	0.46 016	9.97 536	5	53	3 2.0 2.0 2.0
8	9.51 557	86	9.58 025	41	0.45 975	9.97 532	4	52	4 2.7 2.7 2.6
9	9.51 598	87	9.58 065	41	0.45 935	9.97 528	5	51	
10	9.51 629	86	9.58 106	41	0.45 894	9.97 523	4	50	5 3.4 3.3 3.2
11	9.51 666	86	9.58 147	40	0.45 858	9.97 519	4	49	6 4.1 4.0 3.9
12	9.51 702	86	9.58 187	40	0.45 818	9.97 515	4	48	7 4.8 4.7 4.6
13	9.51 738	86	9.58 228	41	0.45 772	9.97 510	5	47	8 5.5 5.3 5.2
14	9.51 774	87	9.58 269	40	0.45 731	9.97 506	4	46	9 6.2 6.0 5.8
15	9.51 811	86	9.58 309	41	0.45 691	9.97 501	5	45	10 6.8 6.7 6.5
16	9.51 847	86	9.58 350	40	0.45 650	9.97 497	4	44	20 18.7 18.3 18.0
17	9.51 888	86	9.58 390	40	0.45 610	9.97 492	5	43	30 20.5 20.0 19.5
18	9.51 919	86	9.58 431	41	0.45 569	9.97 488	4	42	40 27.8 26.7 26.0
19	9.51 955	86	9.58 471	41	0.45 529	9.97 484	5	41	50 34.2 33.3 32.5
20	9.51 991	86	9.58 512	40	0.45 488	9.97 479	4	40	
21	9.52 027	86	9.58 552	41	0.45 448	9.97 475	5	39	
22	9.52 063	86	9.58 593	40	0.45 407	9.97 470	4	38	
23	9.52 099	86	9.58 633	40	0.45 367	9.97 466	5	37	37 36 35
24	9.52 135	86	9.58 673	41	0.45 327	9.97 461	4	36	
25	9.52 171	85	9.58 714	40	0.45 286	9.97 457	5	35	1 0.6 0.6 0.6
26	9.52 207	86	9.58 754	40	0.45 246	9.97 453	4	34	2 1.2 1.2 1.2
27	9.52 243	86	9.58 794	40	0.45 206	9.97 448	5	33	3 1.8 1.8 1.8
28	9.52 278	86	9.58 835	41	0.45 165	9.97 444	4	32	4 2.5 2.4 2.3
29	9.52 314	86	9.58 875	40	0.45 125	9.97 439	5	31	
30	9.52 350	85	9.58 915	40	0.45 085	9.97 435	4	30	5 3.1 3.0 2.9
31	9.52 385	86	9.58 955	40	0.45 045	9.97 430	5	29	6 3.7 3.6 3.5
32	9.52 421	86	9.58 995	40	0.45 005	9.97 426	4	28	7 4.3 4.2 4.1
33	9.52 456	85	9.59 035	40	0.44 965	9.97 421	5	27	8 4.9 4.8 4.7
34	9.52 492	86	9.59 075	40	0.44 925	9.97 417	4	26	9 5.6 5.4 5.2
35	9.52 527	86	9.59 115	40	0.44 885	9.97 412	5	25	10 6.2 6.0 5.8
36	9.52 563	85	9.59 155	40	0.44 845	9.97 408	4	24	20 12.8 12.0 11.7
37	9.52 598	85	9.59 195	40	0.44 805	9.97 404	5	23	30 18.5 18.0 17.5
38	9.52 634	86	9.59 235	40	0.44 765	9.97 399	4	22	40 24.7 24.0 23.3
39	9.52 669	86	9.59 275	40	0.44 725	9.97 394	5	21	50 30.8 30.0 29.2
40	9.52 705	85	9.59 315	40	0.44 685	9.97 390	4	20	
41	9.52 740	85	9.59 355	40	0.44 645	9.97 385	5	19	
42	9.52 775	85	9.59 395	40	0.44 605	9.97 381	4	18	
43	9.52 811	86	9.59 434	39	0.44 566	9.97 376	5	17	34 5 4
44	9.52 846	85	9.59 474	40	0.44 526	9.97 372	4	16	
45	9.52 881	85	9.59 514	40	0.44 486	9.97 367	5	15	1 0.6 0.1 0.1
46	9.52 916	85	9.59 554	40	0.44 446	9.97 363	4	14	2 1.1 0.3 0.1
47	9.52 951	85	9.59 594	39	0.44 407	9.97 358	5	13	3 1.7 0.2 0.2
48	9.52 986	85	9.59 633	40	0.44 367	9.97 353	4	12	4 2.3 0.3 0.3
49	9.53 021	85	9.59 673	40	0.44 327	9.97 349	5	11	
50	9.53 056	84	9.59 712	39	0.44 288	9.97 344	4	10	5 2.8 0.4 0.3
51	9.53 092	86	9.59 752	40	0.44 248	9.97 340	5	9	6 3.4 0.5 0.4
52	9.53 126	84	9.59 791	39	0.44 209	9.97 335	4	8	7 4.0 0.6 0.5
53	9.53 161	85	9.59 831	40	0.44 169	9.97 331	5	7	8 4.5 0.7 0.5
54	9.53 196	85	9.59 870	40	0.44 130	9.97 326	4	6	9 5.1 0.8 0.6
55	9.53 231	85	9.59 910	39	0.44 090	9.97 322	5	5	10 5.7 0.8 0.7
56	9.53 266	85	9.59 949	40	0.44 051	9.97 317	4	4	20 11.8 1.7 1.3
57	9.53 301	85	9.59 989	40	0.44 011	9.97 312	5	3	30 17.0 2.5 2.0
58	9.53 336	84	9.59 028	39	0.43 972	9.97 308	4	2	40 22.7 8.8 2.7
59	9.53 370	85	9.59 067	40	0.43 933	9.97 303	5	1	50 28.8 4.2 3.3
60	9.53 405		9.56 107		0.43 893	9.97 299	4	0	
	L. Cos.	d.	L. Cotg.	c.d.	L. Tang.	L. Sin.	d.		P. P.

	L. Sin.	d.	L. Tang.	c.d.	L. Cotg.	L. Cos.	d.		P. P.			
0	9.53 405	35	9.56 107	39	0.43 893	9.97 299	5	60				
1	9.53 440	35	9.56 146	39	0.43 854	9.97 294	5	59				
2	9.53 475	34	9.56 185	39	0.43 815	9.97 289	5	58				
3	9.53 509	34	9.56 224	40	0.43 776	9.97 285	5	57				
4	9.53 544	35	9.56 264	39	0.43 736	9.97 280	5	56	40	39	38	
5	9.53 578	35	9.56 303	39	0.43 697	9.97 276	5	55	1	0.7	0.6	0.6
6	9.53 613	34	9.56 342	39	0.43 658	9.97 271	5	54	2	1.8	1.8	1.8
7	9.53 647	35	9.56 381	39	0.43 619	9.97 266	5	53	3	2.0	2.0	1.9
8	9.53 682	34	9.56 420	39	0.43 580	9.97 262	5	52	4	2.7	2.6	2.5
9	9.53 716	35	9.56 459	39	0.43 541	9.97 257	5	51	5	3.8	3.2	3.2
10	9.53 751	34	9.56 498	39	0.43 502	9.97 252	5	50	6	4.0	3.9	3.8
11	9.53 785	34	9.56 537	39	0.43 463	9.97 248	5	49	7	4.7	4.6	4.4
12	9.53 819	35	9.56 576	39	0.43 424	9.97 243	5	48	8	5.8	5.2	5.1
13	9.53 854	34	9.56 615	39	0.43 385	9.97 238	5	47	9	6.0	5.8	5.7
14	9.53 888	34	9.56 654	39	0.43 346	9.97 234	5	46	10	6.7	6.5	6.8
15	9.53 922	35	9.56 693	39	0.43 307	9.97 229	5	45	20	13.8	13.0	12.7
16	9.53 957	34	9.56 732	39	0.43 268	9.97 224	5	44	30	20.0	19.5	19.0
17	9.53 991	34	9.56 771	39	0.43 229	9.97 220	5	43	40	26.7	26.0	25.8
18	9.54 025	34	9.56 810	39	0.43 190	9.97 215	5	42	50	33.8	32.5	31.7
19	9.54 059	34	9.56 849	38	0.43 151	9.97 210	5	41				
20	9.54 093	34	9.56 887	39	0.43 113	9.97 206	5	40				
21	9.54 127	34	9.56 926	39	0.43 074	9.97 201	5	39				
22	9.54 161	34	9.56 965	39	0.43 035	9.97 196	5	38				
23	9.54 195	34	9.57 004	38	0.42 996	9.97 192	5	37	37	35	34	
24	9.54 229	34	9.57 042	39	0.42 958	9.97 187	5	36	1	0.6	0.6	0.6
25	9.54 263	34	9.57 081	39	0.42 919	9.97 182	5	35	2	1.2	1.2	1.1
26	9.54 297	34	9.57 120	38	0.42 880	9.97 178	5	34	3	1.8	1.8	1.7
27	9.54 331	34	9.57 158	39	0.42 842	9.97 173	5	33	4	2.5	2.8	2.8
28	9.54 365	34	9.57 197	38	0.42 803	9.97 168	5	32				
29	9.54 399	34	9.57 235	39	0.42 765	9.97 163	5	31	5	3.1	2.9	2.8
30	9.54 433	38	9.57 274	38	0.42 726	9.97 159	5	30	6	3.7	3.6	3.4
31	9.54 466	34	9.57 312	39	0.42 688	9.97 154	5	29	7	4.3	4.1	4.0
32	9.54 500	34	9.57 351	38	0.42 649	9.97 149	5	28	8	4.9	4.7	4.5
33	9.54 534	34	9.57 389	39	0.42 611	9.97 145	5	27	9	5.6	5.2	5.1
34	9.54 567	38	9.57 428	38	0.42 572	9.97 140	5	26	10	6.2	5.8	5.7
35	9.54 601	34	9.57 466	38	0.42 534	9.97 135	5	25	20	12.8	11.7	11.8
36	9.54 635	38	9.57 504	39	0.42 496	9.97 130	5	24	30	18.5	17.5	17.0
37	9.54 668	38	9.57 543	38	0.42 457	9.97 126	5	23	40	24.7	23.8	22.7
38	9.54 702	38	9.57 581	38	0.42 419	9.97 121	5	22	50	30.8	29.2	28.8
39	9.54 735	34	9.57 619	39	0.42 381	9.97 116	5	21				
40	9.54 769	38	9.57 658	38	0.42 342	9.97 111	5	20				
41	9.54 802	38	9.57 696	38	0.42 304	9.97 107	5	19				
42	9.54 836	34	9.57 734	38	0.42 266	9.97 102	5	18	33	5	4	
43	9.54 869	34	9.57 772	38	0.42 228	9.97 097	5	17	1	0.6	0.1	0.1
44	9.54 908	38	9.57 810	39	0.42 190	9.97 092	5	16	2	1.1	0.2	0.1
45	9.54 936	38	9.57 849	38	0.42 151	9.97 087	5	15	3	1.6	0.2	0.2
46	9.54 969	38	9.57 887	38	0.42 113	9.97 083	5	14	4	2.2	0.3	0.8
47	9.55 003	34	9.57 925	38	0.42 075	9.97 078	5	13				
48	9.55 036	38	9.57 963	38	0.42 037	9.97 073	5	12	5	2.8	0.4	0.8
49	9.55 069	38	9.58 001	38	0.41 999	9.97 068	5	11	6	3.8	0.5	0.4
50	9.55 102	34	9.58 039	38	0.41 961	9.97 063	5	10	7	3.8	0.6	0.5
51	9.55 136	38	9.58 077	38	0.41 923	9.97 059	5	9	8	4.4	0.7	0.5
52	9.55 169	38	9.58 115	38	0.41 885	9.97 054	5	8	9	5.0	0.8	0.6
53	9.55 202	38	9.58 153	38	0.41 847	9.97 049	5	7				
54	9.55 235	38	9.58 191	38	0.41 809	9.97 044	5	6	10	5.5	0.8	0.7
55	9.55 268	38	9.58 229	38	0.41 771	9.97 039	5	5	20	11.0	1.7	1.8
56	9.55 301	38	9.58 267	37	0.41 733	9.97 035	5	4	30	16.5	2.5	2.0
57	9.55 334	38	9.58 304	38	0.41 696	9.97 030	5	3	40	22.0	3.8	2.7
58	9.55 367	38	9.58 342	38	0.41 658	9.97 025	5	2	50	27.5	4.2	3.8
59	9.55 400	38	9.58 380	38	0.41 620	9.97 020	5	1				
60	9.55 433		9.58 418		0.41 582	9.97 015		0				
	L. Cos.	d.	L. Cotg.	c.d.	L. Tang.	L. Sin.	d.		P. P.			

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	L. Sin.	d.	L. Tang.	c.d.	L. Cotg.	L. Cos.	d.		P. P.
0	9.55 433	38	9.55 418	37	0.41 582	9.97 015	5	60	
1	9.55 466	38	9.55 455	38	0.41 545	9.97 010	5	59	
2	9.55 499	38	9.55 493	38	0.41 507	9.97 005	5	58	
3	9.55 532	38	9.55 531	38	0.41 469	9.97 001	4	57	
4	9.55 564	38	9.55 569	37	0.41 431	9.96 996	5	56	35 37 36
5	9.55 597	38	9.55 606	38	0.41 394	9.96 991	5	55	1 0.6 0.6 0.6
6	9.55 630	38	9.55 644	37	0.41 356	9.96 986	5	54	2 1.3 1.2 1.2
7	9.55 663	38	9.55 681	38	0.41 319	9.96 981	5	53	3 1.9 1.8 1.8
8	9.55 695	38	9.55 719	38	0.41 281	9.96 976	5	52	4 2.5 2.5 2.4
9	9.55 728	38	9.55 757	37	0.41 243	9.96 971	5	51	
10	9.55 761	38	9.55 794	38	0.41 206	9.96 966	5	50	5 3.2 3.1 3.0
11	9.55 793	38	9.55 832	37	0.41 168	9.96 962	4	49	6 3.8 3.7 3.6
12	9.55 826	38	9.55 869	38	0.41 131	9.96 957	5	48	7 4.4 4.3 4.2
13	9.55 858	38	9.55 907	37	0.41 093	9.96 952	5	47	8 5.1 4.9 4.8
14	9.55 891	38	9.55 944	37	0.41 056	9.96 947	5	46	9 5.7 5.6 5.4
15	9.55 923	38	9.55 981	38	0.41 019	9.96 942	5	45	10 6.3 6.2 6.0
16	9.55 956	38	9.55 1019	37	0.40 981	9.96 937	5	44	20 12.7 12.8 12.0
17	9.55 988	38	9.55 1056	38	0.40 944	9.96 932	5	43	30 19.0 18.5 18.0
18	9.56 021	38	9.55 1094	37	0.40 906	9.96 927	5	42	40 25.8 24.7 24.0
19	9.56 053	38	9.55 1131	37	0.40 869	9.96 922	5	41	50 31.7 30.8 30.0
20	9.56 085	38	9.55 1168	37	0.40 832	9.96 917	5	40	
21	9.56 118	38	9.55 1205	38	0.40 795	9.96 912	5	39	
22	9.56 150	38	9.55 1243	37	0.40 757	9.96 907	5	38	
23	9.56 182	38	9.55 1280	37	0.40 720	9.96 903	4	37	33 32 31
24	9.56 215	38	9.55 1317	37	0.40 683	9.96 898	5	36	
25	9.56 247	38	9.55 1354	37	0.40 646	9.96 893	5	35	1 0.6 0.5 0.5
26	9.56 279	38	9.55 1391	38	0.40 609	9.96 888	5	34	2 1.1 1.1 1.0
27	9.56 311	38	9.55 1429	37	0.40 571	9.96 883	5	33	3 1.6 1.6 1.6
28	9.56 343	38	9.55 1466	37	0.40 534	9.96 878	5	32	4 2.2 2.1 2.1
29	9.56 375	38	9.55 1503	37	0.40 497	9.96 873	5	31	
30	9.56 408	38	9.55 1540	37	0.40 460	9.96 868	5	30	5 2.8 2.7 2.6
31	9.56 440	38	9.55 1577	37	0.40 423	9.96 863	5	29	6 3.3 3.2 3.1
32	9.56 472	38	9.55 1614	37	0.40 386	9.96 858	5	28	7 3.8 3.7 3.6
33	9.56 504	38	9.55 1651	37	0.40 349	9.96 853	5	27	8 4.4 4.3 4.1
34	9.56 536	38	9.55 1688	37	0.40 312	9.96 848	5	26	9 5.0 4.8 4.6
35	9.56 568	31	9.55 1725	37	0.40 275	9.96 843	5	25	10 5.5 5.3 5.2
36	9.56 599	32	9.55 1762	37	0.40 238	9.96 838	5	24	20 11.0 10.7 10.8
37	9.56 631	32	9.55 1799	36	0.40 201	9.96 833	5	23	30 16.5 16.0 15.5
38	9.56 663	32	9.55 1835	37	0.40 165	9.96 828	5	22	40 22.0 21.8 20.7
39	9.56 695	32	9.55 1872	37	0.40 128	9.96 823	5	21	50 27.5 26.7 25.8
40	9.56 727	32	9.55 1909	37	0.40 091	9.96 818	5	20	
41	9.56 759	31	9.55 1946	37	0.40 054	9.96 813	5	19	
42	9.56 790	32	9.55 1983	36	0.40 017	9.96 808	5	18	6 5 4
43	9.56 822	32	9.55 2019	37	0.39 981	9.96 803	5	17	1 0.1 0.1 0.1
44	9.56 854	32	9.55 2056	37	0.39 944	9.96 798	5	16	2 0.2 0.2 0.1
45	9.56 886	31	9.55 2093	36	0.39 907	9.96 793	5	15	3 0.3 0.3 0.2
46	9.56 917	32	9.55 2130	36	0.39 870	9.96 788	5	14	4 0.4 0.4 0.3
47	9.56 949	31	9.55 2166	37	0.39 834	9.96 783	5	13	
48	9.56 980	32	9.55 2203	37	0.39 797	9.96 778	5	12	5 0.5 0.4 0.3
49	9.57 012	32	9.55 2240	36	0.39 760	9.96 773	5	11	6 0.6 0.5 0.4
50	9.57 044	31	9.55 2276	37	0.39 724	9.96 767	5	10	7 0.7 0.6 0.5
51	9.57 075	32	9.55 2313	36	0.39 687	9.96 762	5	9	8 0.8 0.7 0.5
52	9.57 107	31	9.55 2349	37	0.39 651	9.96 757	5	8	9 0.9 0.8 0.6
53	9.57 138	31	9.55 2386	36	0.39 614	9.96 752	5	7	
54	9.57 169	32	9.55 2422	37	0.39 578	9.96 747	5	6	10 1.0 0.9 0.7
55	9.57 201	31	9.55 2459	36	0.39 541	9.96 742	5	5	20 2.0 1.7 1.3
56	9.57 232	32	9.55 2495	37	0.39 505	9.96 737	5	4	30 3.0 2.5 2.0
57	9.57 264	31	9.55 2532	36	0.39 468	9.96 732	5	3	40 4.0 3.3 2.7
58	9.57 295	31	9.55 2568	37	0.39 432	9.96 727	5	2	50 5.0 4.2 3.3
59	9.57 326	32	9.55 2605	36	0.39 395	9.96 722	5	1	
60	9.57 358		9.55 2641		0.39 359	9.96 717		0	
	L. Cos.	d.	L. Cotg.	c.d.	L. Tang.	L. Sin.	d.		P. P.

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	L. Sin.	d.	L. Tang.	c.d.	L. Cotg.	L. Cos.	d.		P. P.
0	9.57 858	31	9.60 641	36	0.89 859	9.96 717	6	60	
1	9.57 889	31	9.60 677	37	0.89 828	9.96 711	5	59	
2	9.57 420	31	9.60 714	36	0.89 286	9.96 706	5	58	
3	9.57 451	31	9.60 750	36	0.89 250	9.96 701	5	57	
4	9.57 482	32	9.60 786	37	0.89 214	9.96 696	5	56	37 36 35
5	9.57 514	31	9.60 822	36	0.89 177	9.96 691	5	55	1 0.6 0.6 0.6
6	9.57 545	31	9.60 859	36	0.89 141	9.96 686	5	54	2 1.2 1.2 1.2
7	9.57 576	31	9.60 895	36	0.89 105	9.96 681	5	53	3 1.8 1.8 1.8
8	9.57 607	31	9.60 931	36	0.89 069	9.96 676	5	52	4 2.5 2.4 2.3
9	9.57 638	31	9.60 967	37	0.89 033	9.96 670	5	51	
10	9.57 669	31	9.61 004	36	0.88 996	9.96 665	5	50	5 3.1 3.0 2.9
11	9.57 706	31	9.61 040	36	0.88 960	9.96 660	5	49	6 3.7 3.6 3.5
12	9.57 731	31	9.61 076	36	0.88 924	9.96 655	5	48	7 4.3 4.2 4.1
13	9.57 762	31	9.61 112	36	0.88 888	9.96 650	5	47	8 4.9 4.8 4.7
14	9.57 793	31	9.61 148	36	0.88 852	9.96 645	5	46	9 5.6 5.4 5.2
15	9.57 824	31	9.61 184	36	0.88 816	9.96 640	6	45	10 6.2 6.0 5.8
16	9.57 855	30	9.61 220	36	0.88 780	9.96 634	5	44	20 12.3 12.0 11.7
17	9.57 885	31	9.61 256	36	0.88 744	9.96 629	5	43	30 18.5 18.0 17.5
18	9.57 916	31	9.61 292	36	0.88 708	9.96 624	5	42	40 24.7 24.0 23.8
19	9.57 947	31	9.61 328	36	0.88 672	9.96 619	5	41	50 30.8 30.0 29.2
20	9.57 978	30	9.61 364	36	0.88 636	9.96 614	6	40	
21	9.58 003	30	9.61 400	36	0.88 600	9.96 608	5	39	
22	9.58 039	31	9.61 436	36	0.88 564	9.96 603	5	38	
23	9.58 070	31	9.61 472	36	0.88 528	9.96 598	5	37	32 31 30
24	9.58 101	30	9.61 508	36	0.88 492	9.96 593	5	36	
25	9.58 131	31	9.61 544	35	0.88 456	9.96 588	6	35	1 0.5 0.5 0.5
26	9.58 162	30	9.61 579	35	0.88 421	9.96 582	5	34	2 1.1 1.0 1.0
27	9.58 192	31	9.61 615	36	0.88 385	9.96 577	5	33	3 1.6 1.6 1.5
28	9.58 223	30	9.61 651	36	0.88 349	9.96 572	5	32	4 2.1 2.1 2.0
29	9.58 253	31	9.61 687	35	0.88 313	9.96 567	5	31	
30	9.58 284	30	9.61 722	36	0.88 278	9.96 562	6	30	5 2.7 2.6 2.5
31	9.58 314	31	9.61 758	36	0.88 242	9.96 556	5	29	6 3.2 3.1 3.0
32	9.58 345	30	9.61 794	36	0.88 206	9.96 551	5	28	7 3.7 3.6 3.5
33	9.58 375	31	9.61 830	35	0.88 170	9.96 546	5	27	8 4.3 4.1 4.0
34	9.58 406	30	9.61 865	36	0.88 135	9.96 541	6	26	9 4.8 4.6 4.5
35	9.58 436	31	9.61 901	35	0.88 099	9.96 535	5	25	10 5.3 5.2 5.0
36	9.58 467	30	9.61 936	36	0.88 064	9.96 530	5	24	20 10.7 10.3 10.0
37	9.58 497	30	9.61 972	36	0.88 028	9.96 525	5	23	30 16.0 15.5 15.0
38	9.58 527	30	9.62 008	35	0.87 992	9.96 520	6	22	40 21.8 20.7 20.0
39	9.58 557	31	9.62 043	36	0.87 957	9.96 514	5	21	50 26.7 25.8 25.0
40	9.58 588	30	9.62 079	35	0.87 921	9.96 509	5	20	
41	9.58 618	30	9.62 114	36	0.87 886	9.96 504	6	19	
42	9.58 648	30	9.62 150	35	0.87 850	9.96 498	5	18	
43	9.58 679	31	9.62 185	36	0.87 815	9.96 493	5	17	29 6 5
44	9.58 709	30	9.62 221	35	0.87 779	9.96 488	5	16	
45	9.58 739	30	9.62 256	36	0.87 744	9.96 483	6	15	1 0.5 0.1 0.1
46	9.58 769	30	9.62 292	35	0.87 708	9.96 477	5	14	2 1.0 0.2 0.2
47	9.58 799	30	9.62 327	35	0.87 673	9.96 472	5	13	3 1.4 0.3 0.2
48	9.58 829	30	9.62 362	36	0.87 638	9.96 467	5	12	4 1.9 0.4 0.3
49	9.58 859	30	9.62 396	35	0.87 602	9.96 461	6	11	
50	9.58 889	30	9.62 433	35	0.87 567	9.96 456	5	10	5 2.4 0.5 0.4
51	9.58 919	30	9.62 468	36	0.87 532	9.96 451	6	9	6 2.9 0.6 0.5
52	9.58 949	30	9.62 504	35	0.87 496	9.96 445	5	8	7 3.4 0.7 0.6
53	9.58 979	30	9.62 539	35	0.87 461	9.96 440	5	7	8 3.9 0.8 0.7
54	9.59 009	30	9.62 574	35	0.87 426	9.96 435	6	6	9 4.4 0.9 0.8
55	9.59 039	30	9.62 609	36	0.87 391	9.96 429	5	5	10 4.8 1.0 0.8
56	9.59 069	29	9.62 645	35	0.87 355	9.96 424	5	4	20 9.7 2.0 1.7
57	9.59 098	30	9.62 680	35	0.87 320	9.96 419	5	3	30 14.5 3.0 2.5
58	9.59 128	30	9.62 715	35	0.87 285	9.96 413	6	2	40 19.3 4.0 3.3
59	9.59 158	30	9.62 750	35	0.87 250	9.96 408	5	1	50 24.2 5.0 4.2
60	9.59 188		9.62 785		0.87 215	9.96 403		0	
	L. Cos.	d.	L. Cotg.	c.d.	L. Tang.	L. Sin.	d.		P. P.

	L. Sin.	d.	L. Tang.	c.d.	L. Cotg.	L. Cos.	d.		P. P.
0	9.59 188	30	9.62 785	35	0.87 215	9.96 408	6	60	
1	9.59 218	29	9.62 890	35	0.87 180	9.96 397	6	59	
2	9.59 247	29	9.62 855	35	0.87 145	9.96 392	6	58	
3	9.59 277	30	9.62 890	35	0.87 110	9.96 387	6	57	
4	9.59 307	29	9.62 926	35	0.87 074	9.96 381	6	56	
5	9.59 336	30	9.62 961	35	0.87 039	9.96 376	6	55	1 0.6 0.6 0.6
6	9.59 366	30	9.62 996	35	0.87 004	9.96 370	6	54	2 1.2 1.2 1.1
7	9.59 396	29	9.63 031	35	0.86 969	9.96 365	6	53	3 1.8 1.8 1.7
8	9.59 425	29	9.63 066	35	0.86 934	9.96 360	6	52	4 2.4 2.3 2.3
9	9.59 455	29	9.63 101	34	0.86 899	9.96 354	6	51	
10	9.59 484	30	9.63 135	35	0.86 865	9.96 349	6	50	5 3.0 2.9 2.8
11	9.59 514	30	9.63 170	35	0.86 830	9.96 343	6	49	6 3.6 3.5 3.4
12	9.59 543	29	9.63 205	35	0.86 795	9.96 338	6	48	7 4.2 4.1 4.0
13	9.59 573	30	9.63 240	35	0.86 760	9.96 333	6	47	8 4.8 4.7 4.6
14	9.59 602	30	9.63 275	35	0.86 725	9.96 327	6	46	9 5.4 5.3 5.1
15	9.59 632	29	9.63 310	35	0.86 690	9.96 322	6	45	10 6.0 5.8 5.7
16	9.59 661	29	9.63 345	34	0.86 655	9.96 316	6	44	20 12.0 11.7 11.8
17	9.59 690	30	9.63 379	35	0.86 621	9.96 311	6	43	30 18.0 17.5 17.0
18	9.59 720	30	9.63 414	35	0.86 586	9.96 305	6	42	40 24.0 23.8 22.7
19	9.59 749	29	9.63 449	35	0.86 551	9.96 300	6	41	50 30.0 29.2 28.3
20	9.59 778	30	9.63 484	35	0.86 516	9.96 294	6	40	
21	9.59 808	30	9.63 519	35	0.86 481	9.96 289	6	39	
22	9.59 837	29	9.63 558	34	0.86 447	9.96 284	6	38	
23	9.59 866	29	9.63 593	35	0.86 412	9.96 278	6	37	
24	9.59 895	29	9.63 628	34	0.86 377	9.96 273	6	36	30 3.0 2.9 2.8
25	9.59 924	30	9.63 663	35	0.86 343	9.96 267	6	35	1 0.5 0.5 0.5
26	9.59 954	30	9.63 698	35	0.86 308	9.96 262	6	34	2 1.0 1.0 0.9
27	9.59 983	29	9.63 733	34	0.86 274	9.96 256	6	33	3 1.5 1.4 1.4
28	9.60 012	29	9.63 768	35	0.86 239	9.96 251	6	32	4 2.0 1.9 1.9
29	9.60 041	29	9.63 799	34	0.86 204	9.96 245	6	31	
30	9.60 070	30	9.63 830	35	0.86 170	9.96 240	6	30	5 2.5 2.4 2.3
31	9.60 099	29	9.63 865	35	0.86 135	9.96 234	6	29	6 3.0 2.9 2.8
32	9.60 128	29	9.63 899	34	0.86 101	9.96 229	6	28	7 3.5 3.4 3.3
33	9.60 157	29	9.63 934	35	0.86 066	9.96 223	6	27	8 4.0 3.9 3.7
34	9.60 186	29	9.63 968	35	0.86 032	9.96 218	6	26	9 4.5 4.4 4.2
35	9.60 215	29	9.64 003	34	0.85 997	9.96 212	6	25	10 5.0 4.8 4.7
36	9.60 244	29	9.64 037	35	0.85 963	9.96 207	6	24	20 10.0 9.7 9.8
37	9.60 273	29	9.64 073	34	0.85 928	9.96 201	6	23	30 15.0 14.5 14.0
38	9.60 302	29	9.64 106	34	0.85 894	9.96 196	6	22	40 20.0 19.8 18.7
39	9.60 331	28	9.64 140	35	0.85 860	9.96 190	6	21	50 25.0 24.2 23.3
40	9.60 359	29	9.64 175	34	0.85 825	9.96 185	6	20	
41	9.60 388	29	9.64 209	34	0.85 791	9.96 179	6	19	
42	9.60 417	29	9.64 243	35	0.85 757	9.96 174	6	18	
43	9.60 446	28	9.64 278	35	0.85 722	9.96 168	6	17	6 5
44	9.60 474	29	9.64 312	34	0.85 688	9.96 162	6	16	1 0.1 0.1
45	9.60 503	29	9.64 346	35	0.85 654	9.96 157	6	15	2 0.2 0.2
46	9.60 532	29	9.64 381	34	0.85 619	9.96 151	6	14	3 0.3 0.2
47	9.60 561	28	9.64 415	34	0.85 585	9.96 146	6	13	4 0.4 0.3
48	9.60 589	28	9.64 449	34	0.85 551	9.96 140	6	12	
49	9.60 618	28	9.64 483	34	0.85 517	9.96 135	6	11	5 0.5 0.4
50	9.60 646	29	9.64 517	35	0.85 483	9.96 129	6	10	6 0.6 0.5
51	9.60 675	29	9.64 552	34	0.85 448	9.96 123	6	9	7 0.7 0.6
52	9.60 704	28	9.64 586	34	0.85 414	9.96 118	6	8	8 0.8 0.7
53	9.60 732	29	9.64 620	34	0.85 380	9.96 112	6	7	9 0.9 0.8
54	9.60 761	28	9.64 654	34	0.85 346	9.96 107	6	6	
55	9.60 789	28	9.64 688	34	0.85 312	9.96 101	6	5	10 1.0 0.8
56	9.60 818	28	9.64 722	34	0.85 278	9.96 095	6	4	20 2.0 1.7
57	9.60 846	29	9.64 756	34	0.85 244	9.96 090	6	3	30 3.0 2.5
58	9.60 875	28	9.64 790	34	0.85 210	9.96 084	6	2	40 4.0 3.8
59	9.60 903	28	9.64 824	34	0.85 176	9.96 079	6	1	50 5.0 4.2
60	9.60 931		9.64 858		0.85 142	9.96 073		0	
	L. Cos.	d.	L. Cotg.	c.d.	L. Tang.	L. Sin.	d.		P. P.

	L. Sin.	d.	L. Tang.	c.d.	L. Cotg.	L. Cos.	d.		P. P.
0	9.60 981	29	9.64 858	84	0.85 142	9.96 078	6	60	
1	9.60 960	28	9.64 892	84	0.85 108	9.96 067	5	59	
2	9.60 938	28	9.64 926	84	0.85 074	9.96 062	6	58	
3	9.61 016	29	9.64 960	84	0.85 040	9.96 056	6	57	
4	9.61 045	28	9.64 994	84	0.85 006	9.96 050	5	56	
5	9.61 073	28	9.65 028	84	0.84 972	9.96 045	6	55	1   0.6 0.6
6	9.61 101	28	9.65 062	84	0.84 938	9.96 039	5	54	2   1.1 1.1
7	9.61 129	29	9.65 096	84	0.84 904	9.96 034	5	53	3   1.7 1.6
8	9.61 153	28	9.65 130	84	0.84 870	9.96 028	6	52	4   2.3 2.2
9	9.61 186	23	9.65 164	88	0.84 836	9.96 022	5	51	
10	9.61 214	28	9.65 197	84	0.84 808	9.96 017	6	50	5   2.8 2.8
11	9.61 242	23	9.65 231	84	0.84 769	9.96 011	6	49	6   3.4 3.4
12	9.61 270	23	9.65 265	84	0.84 735	9.96 005	5	48	7   4.0 3.8
13	9.61 293	23	9.65 299	84	0.84 701	9.96 000	6	47	8   4.5 4.4
14	9.61 326	23	9.65 333	88	0.84 667	9.95 994	5	46	9   5.1 5.0
15	9.61 354	28	9.65 366	84	0.84 634	9.95 988	6	45	10   5.7 5.5
16	9.61 382	29	9.65 400	84	0.84 600	9.95 982	5	44	20   11.8 11.0
17	9.61 411	27	9.65 434	88	0.84 566	9.95 977	5	43	30   17.0 16.5
18	9.61 438	28	9.65 467	84	0.84 532	9.95 971	6	42	40   22.7 22.0
19	9.61 466	23	9.65 501	84	0.84 499	9.95 965	5	41	50   28.8 27.5
20	9.61 494	28	9.65 535	88	0.84 465	9.95 960	6	40	
21	9.61 522	23	9.65 568	84	0.84 432	9.95 954	6	39	
22	9.61 550	23	9.65 602	84	0.84 398	9.95 948	6	38	
23	9.61 578	23	9.65 636	88	0.84 364	9.95 942	5	37	
24	9.61 606	28	9.65 669	84	0.84 331	9.95 937	6	36	
25	9.61 634	23	9.65 703	88	0.84 297	9.95 931	6	35	1   0.5 0.5 0.4
26	9.61 662	27	9.65 736	84	0.84 264	9.95 925	5	34	2   1.0 0.9 0.9
27	9.61 689	28	9.65 770	88	0.84 230	9.95 920	6	33	3   1.4 1.4 1.4
28	9.61 717	28	9.65 808	84	0.84 197	9.95 914	6	32	4   1.9 1.9 1.8
29	9.61 745	23	9.65 837	88	0.84 163	9.95 908	5	31	
30	9.61 773	27	9.65 870	84	0.84 130	9.95 902	5	30	5   2.4 2.3 2.2
31	9.61 800	28	9.65 904	88	0.84 096	9.95 897	6	29	6   2.9 2.8 2.7
32	9.61 828	28	9.65 937	84	0.84 063	9.95 891	6	28	7   3.4 3.3 3.2
33	9.61 856	27	9.65 971	88	0.84 029	9.95 885	6	27	8   3.9 3.7 3.6
34	9.61 883	28	9.66 004	84	0.83 996	9.95 879	6	26	9   4.4 4.2 4.0
35	9.61 911	23	9.66 038	88	0.83 962	9.95 873	5	25	10   4.8 4.7 4.5
36	9.61 939	27	9.66 071	88	0.83 929	9.95 868	6	24	20   9.7 9.8 9.0
37	9.61 966	28	9.66 104	84	0.83 896	9.95 862	6	23	30   14.5 14.0 13.5
38	9.61 994	27	9.66 138	88	0.83 862	9.95 856	6	22	40   19.8 18.7 18.0
39	9.62 021	28	9.66 171	88	0.83 829	9.95 850	6	21	50   24.2 23.3 22.5
40	9.62 049	27	9.66 204	84	0.83 796	9.95 844	5	20	
41	9.62 076	28	9.66 238	88	0.83 762	9.95 839	6	19	
42	9.62 104	27	9.66 271	88	0.83 729	9.95 833	6	18	
43	9.62 131	27	9.66 304	88	0.83 696	9.95 827	6	17	
44	9.62 159	29	9.66 337	84	0.83 663	9.95 821	6	16	
45	9.62 186	23	9.66 371	88	0.83 629	9.95 815	5	15	1   0.1 0.1
46	9.62 214	27	9.66 404	88	0.83 596	9.95 810	6	14	2   0.2 0.2
47	9.62 241	27	9.66 437	88	0.83 563	9.95 804	6	13	3   0.3 0.2
48	9.62 268	28	9.66 470	88	0.83 530	9.95 798	6	12	4   0.4 0.3
49	9.62 296	29	9.66 503	84	0.83 497	9.95 792	6	11	
50	9.62 323	27	9.66 537	88	0.83 463	9.95 786	6	10	5   0.5 0.4
51	9.62 350	28	9.66 570	88	0.83 430	9.95 780	6	9	6   0.6 0.5
52	9.62 377	27	9.66 603	88	0.83 397	9.95 775	5	8	7   0.7 0.6
53	9.62 405	27	9.66 636	88	0.83 364	9.95 769	6	7	8   0.8 0.7
54	9.62 432	27	9.66 669	88	0.83 331	9.95 763	6	6	9   0.9 0.8
55	9.62 459	27	9.66 702	88	0.83 295	9.95 757	6	5	10   1.0 0.8
56	9.62 486	27	9.66 735	88	0.83 265	9.95 751	6	4	20   2.0 1.7
57	9.62 513	28	9.66 768	88	0.83 232	9.95 745	6	3	30   3.0 2.5
58	9.62 541	27	9.66 801	88	0.83 199	9.95 739	6	2	40   4.0 3.3
59	9.62 568	27	9.66 834	88	0.83 166	9.95 733	5	1	50   5.0 4.2
60	9.62 595		9.66 867		0.83 133	9.95 723		0	
	L. Cos.	d.	L. Cotg.	c.d.	L. Tang.	L. Sin.	d.		P. P.



	L. Sin.	d.	L. Tang.	c.d.	L. Cotg.	L. Cos.	d.		P. P.
0	9.62 595	27	9.66 867	33	0.33 183	9.95 728	6	60	
1	9.62 622	27	9.66 900	33	0.33 100	9.95 722	6	59	
2	9.62 649	27	9.66 933	33	0.33 067	9.95 716	6	58	
3	9.62 676	27	9.66 966	33	0.33 034	9.95 710	6	57	
4	9.62 703	27	9.66 999	33	0.33 001	9.95 704	6	56	
5	9.62 730	27	9.67 032	33	0.32 968	9.95 698	6	55	
6	9.62 757	27	9.67 065	33	0.32 935	9.95 692	6	54	
7	9.62 784	27	9.67 098	33	0.32 902	9.95 686	6	53	
8	9.62 811	27	9.67 131	33	0.32 869	9.95 680	6	52	
9	9.62 838	27	9.67 163	33	0.32 837	9.95 674	6	51	
10	9.62 865	27	9.67 196	33	0.32 804	9.95 668	5	50	
11	9.62 892	27	9.67 229	33	0.32 771	9.95 663	6	49	
12	9.62 918	26	9.67 262	33	0.32 738	9.95 657	6	48	
13	9.62 945	27	9.67 295	33	0.32 705	9.95 651	6	47	
14	9.62 972	27	9.67 327	33	0.32 673	9.95 645	6	46	
15	9.62 999	27	9.67 360	33	0.32 640	9.95 639	6	45	
16	9.63 026	26	9.67 393	33	0.32 607	9.95 633	6	44	
17	9.63 052	26	9.67 426	33	0.32 574	9.95 627	6	43	
18	9.63 079	27	9.67 458	33	0.32 542	9.95 621	6	42	
19	9.63 106	27	9.67 491	33	0.32 509	9.95 615	6	41	
20	9.63 133	26	9.67 524	33	0.32 476	9.95 609	6	40	
21	9.63 159	27	9.67 556	33	0.32 444	9.95 603	6	39	
22	9.63 186	27	9.67 589	33	0.32 411	9.95 597	6	38	
23	9.63 213	27	9.67 622	33	0.32 378	9.95 591	6	37	
24	9.63 239	26	9.67 654	33	0.32 346	9.95 585	6	36	
25	9.63 266	26	9.67 687	33	0.32 313	9.95 579	6	35	
26	9.63 292	27	9.67 719	33	0.32 281	9.95 573	6	34	
27	9.63 319	26	9.67 752	33	0.32 248	9.95 567	6	33	
28	9.63 345	26	9.67 785	33	0.32 215	9.95 561	6	32	
29	9.63 372	26	9.67 817	33	0.32 183	9.95 555	6	31	
30	9.63 398	27	9.67 850	33	0.32 150	9.95 549	6	30	
31	9.63 425	26	9.67 882	33	0.32 118	9.95 543	6	29	
32	9.63 451	26	9.67 915	33	0.32 085	9.95 537	6	28	
33	9.63 478	27	9.67 947	33	0.32 053	9.95 531	6	27	
34	9.63 504	26	9.67 980	33	0.32 020	9.95 525	6	26	
35	9.63 531	26	9.68 012	33	0.31 988	9.95 519	6	25	
36	9.63 557	26	9.68 044	33	0.31 956	9.95 513	6	24	
37	9.63 583	27	9.68 077	33	0.31 923	9.95 507	6	23	
38	9.63 610	26	9.68 109	33	0.31 891	9.95 500	6	22	
39	9.63 636	26	9.68 142	33	0.31 858	9.95 494	6	21	
40	9.63 662	27	9.68 174	33	0.31 826	9.95 488	6	20	
41	9.63 689	26	9.68 206	33	0.31 794	9.95 482	6	19	
42	9.63 715	26	9.68 239	33	0.31 761	9.95 476	6	18	
43	9.63 741	26	9.68 271	33	0.31 729	9.95 470	6	17	
44	9.63 767	27	9.68 303	33	0.31 697	9.95 464	6	16	
45	9.63 794	26	9.68 336	33	0.31 664	9.95 458	6	15	
46	9.63 820	26	9.68 368	33	0.31 632	9.95 452	6	14	
47	9.63 846	26	9.68 400	33	0.31 600	9.95 446	6	13	
48	9.63 872	26	9.68 432	33	0.31 568	9.95 440	6	12	
49	9.63 898	26	9.68 465	33	0.31 535	9.95 434	7	11	
50	9.63 924	26	9.68 497	33	0.31 503	9.95 427	6	10	
51	9.63 950	26	9.68 529	33	0.31 471	9.95 421	6	9	
52	9.63 976	26	9.68 561	33	0.31 439	9.95 415	6	8	
53	9.64 002	26	9.68 593	33	0.31 407	9.95 409	6	7	
54	9.64 028	26	9.68 626	33	0.31 374	9.95 403	6	6	
55	9.64 054	26	9.68 658	33	0.31 342	9.95 397	6	5	
56	9.64 080	26	9.68 690	33	0.31 310	9.95 391	7	4	
57	9.64 106	26	9.68 722	33	0.31 278	9.95 384	6	3	
58	9.64 132	26	9.68 754	33	0.31 246	9.95 378	6	2	
59	9.64 158	26	9.68 786	33	0.31 214	9.95 372	6	1	
60	9.64 184		9.68 818		0.31 182	9.95 366		0	
	L. Cos.	d.	L. Cotg.	c.d.	L. Tang.	L. Sin.	d.		P. P.

	L. Sin.	d.	L. Tang.	c.d.	L. Cotg.	L. Cos.	d.		P. P.
0	9.64 184	26	9.68 818	32	0.81 182	9.95 866	6	60	
1	9.64 210	26	9.68 850	32	0.81 150	9.95 860	6	59	
2	9.64 236	26	9.68 882	32	0.81 118	9.95 854	6	58	
3	9.64 262	26	9.68 914	32	0.81 086	9.95 848	7	57	
4	9.64 288	25	9.68 946	32	0.81 054	9.95 841	6	56	
5	9.64 318	26	9.68 978	32	0.81 022	9.95 835	6	55	1 0.5 0.5
6	9.64 349	26	9.69 010	32	0.80 990	9.95 829	6	54	2 1.1 1.0
7	9.64 380	26	9.69 042	32	0.80 958	9.95 822	6	53	3 1.6 1.6
8	9.64 391	26	9.69 074	32	0.80 926	9.95 817	7	52	4 2.1 2.1
9	9.64 417	25	9.69 106	32	0.80 894	9.95 810	6	51	
10	9.64 442	26	9.69 138	32	0.80 862	9.95 804	6	50	5 2.7 2.6
11	9.64 468	26	9.69 170	32	0.80 830	9.95 798	6	49	6 3.2 3.1
12	9.64 494	25	9.69 202	32	0.80 798	9.95 792	6	48	7 3.7 3.6
13	9.64 519	25	9.69 234	32	0.80 766	9.95 786	7	47	8 4.3 4.1
14	9.64 545	26	9.69 266	32	0.80 734	9.95 779	6	46	9 4.8 4.6
15	9.64 571	25	9.69 298	31	0.80 702	9.95 773	6	45	10 5.3 5.2
16	9.64 596	26	9.69 329	32	0.80 671	9.95 767	6	44	20 10.7 10.8
17	9.64 622	25	9.69 361	32	0.80 639	9.95 761	7	43	30 16.0 15.5
18	9.64 647	25	9.69 393	32	0.80 607	9.95 754	6	42	40 21.3 20.7
19	9.64 673	26	9.69 425	32	0.80 575	9.95 748	6	41	50 26.7 25.8
20	9.64 698	26	9.69 457	31	0.80 543	9.95 742	6	40	
21	9.64 724	25	9.69 488	32	0.80 512	9.95 736	7	39	
22	9.64 749	26	9.69 520	32	0.80 480	9.95 729	6	38	
23	9.64 775	25	9.69 552	32	0.80 448	9.95 723	6	37	
24	9.64 800	26	9.69 584	31	0.80 416	9.95 717	6	36	
25	9.64 826	25	9.69 615	32	0.80 385	9.95 711	7	35	1 0.4 0.4
26	9.64 851	26	9.69 647	32	0.80 353	9.95 704	6	34	2 0.9 0.8
27	9.64 877	25	9.69 679	31	0.80 321	9.95 698	6	33	3 1.2 1.2
28	9.64 902	25	9.69 710	32	0.80 290	9.95 692	7	32	4 1.7 1.7
29	9.64 927	26	9.69 742	32	0.80 258	9.95 685	6	31	
30	9.64 958	25	9.69 774	31	0.80 226	9.95 679	6	30	5 2.3 2.1
31	9.64 978	25	9.69 805	32	0.80 195	9.95 673	6	29	6 2.8 2.5
32	9.65 008	26	9.69 837	31	0.80 163	9.95 667	7	28	7 3.0 2.9
33	9.65 029	25	9.69 868	32	0.80 132	9.95 660	6	27	8 3.5 3.3
34	9.65 054	25	9.69 900	32	0.80 100	9.95 654	6	26	9 3.9 3.8
35	9.65 079	25	9.69 932	31	0.80 068	9.95 648	7	25	10 4.3 4.2
36	9.65 104	26	9.69 963	32	0.80 037	9.95 641	6	24	20 8.7 8.8
37	9.65 129	25	9.69 995	31	0.80 005	9.95 635	6	23	30 13.0 12.5
38	9.65 155	25	9.70 026	32	0.29 974	9.95 629	7	22	40 17.8 16.7
39	9.65 180	25	9.70 058	31	0.29 942	9.95 623	6	21	50 21.7 20.8
40	9.65 205	25	9.70 089	32	0.29 911	9.95 616	6	20	
41	9.65 230	25	9.70 121	31	0.29 879	9.95 610	7	19	
42	9.65 255	26	9.70 152	32	0.29 848	9.95 603	6	18	
43	9.65 281	25	9.70 184	31	0.29 816	9.95 597	7	17	
44	9.65 306	25	9.70 215	32	0.29 785	9.95 590	6	16	
45	9.65 331	25	9.70 247	31	0.29 753	9.95 584	6	15	7 0.1 0.1
46	9.65 356	25	9.70 278	31	0.29 722	9.95 578	7	14	2 0.2 0.2
47	9.65 381	25	9.70 309	32	0.29 691	9.95 571	6	13	3 0.4 0.4
48	9.65 406	25	9.70 341	31	0.29 659	9.95 565	6	12	4 0.5 0.4
49	9.65 431	25	9.70 373	32	0.29 628	9.95 559	7	11	
50	9.65 456	25	9.70 404	31	0.29 596	9.95 552	6	10	5 0.6 0.5
51	9.65 481	25	9.70 435	31	0.29 565	9.95 546	7	9	6 0.7 0.6
52	9.65 506	25	9.70 466	32	0.29 534	9.95 539	6	8	7 0.8 0.7
53	9.65 531	25	9.70 498	31	0.29 502	9.95 533	6	7	8 0.9 0.8
54	9.65 556	24	9.70 529	31	0.29 471	9.95 527	7	6	9 1.0 0.9
55	9.65 580	25	9.70 560	32	0.29 440	9.95 520	6	5	10 1.3 1.0
56	9.65 605	25	9.70 592	31	0.29 408	9.95 514	7	4	20 2.8 2.0
57	9.65 630	25	9.70 623	31	0.29 377	9.95 507	6	3	30 3.5 3.0
58	9.65 655	25	9.70 654	31	0.29 346	9.95 501	6	2	40 4.7 4.0
59	9.65 680	25	9.70 685	32	0.29 315	9.94 995	7	1	50 5.8 5.0
60	9.65 705		9.70 717		0.29 283	9.94 988		0	
	L. Cos.	d.	L. Cotg.	c.d.	L. Tang.	L. Sin.	d.		P. P.

	L. Sin.	d.	L. Tang.	c.d.	L. Cotg.	L. Cos.	d.		P. P.
0	9.65 705	24	9.70 717	81	0.29 288	9.94 988	6	60	
1	9.65 729		9.70 748	81	0.29 252	9.94 982	7	59	
2	9.65 754	25	9.70 779	81	0.29 221	9.94 975	6	58	
3	9.65 779	25	9.70 810	81	0.29 190	9.94 969	7	57	
4	9.65 804	24	9.70 841	82	0.29 159	9.94 962	6	56	32 31 30
5	9.65 828		9.70 878	81	0.29 127	9.94 956	7	55	1 0.5 0.5 0.5
6	9.65 858	25	9.70 904	81	0.29 096	9.94 949	6	54	2 1.1 1.0 1.0
7	9.65 878	25	9.70 885	81	0.29 065	9.94 943	7	53	3 1.6 1.6 1.5
8	9.65 902	25	9.70 966	81	0.29 034	9.94 936	6	52	4 2.1 2.1 2.0
9	9.65 927	25	9.70 997	81	0.29 008	9.94 930	7	51	
10	9.65 952		9.71 028	81	0.28 972	9.94 922	6	50	5 2.7 2.6 2.5
11	9.65 976	24	9.71 059	81	0.28 941	9.94 917	7	49	6 3.2 3.1 3.0
12	9.66 001	25	9.71 090	81	0.28 910	9.94 911	6	48	7 3.7 3.6 3.5
13	9.66 025	24	9.71 121	82	0.28 879	9.94 904	7	47	8 4.3 4.1 4.0
14	9.66 050	25	9.71 158	81	0.28 847	9.94 898	6	46	9 4.8 4.6 4.5
15	9.66 075		9.71 184	81	0.28 816	9.94 891	7	45	10 5.3 5.2 5.0
16	9.66 099	24	9.71 215	81	0.28 785	9.94 885	6	44	20 10.7 10.8 10.0
17	9.66 124	25	9.71 246	81	0.28 754	9.94 878	7	43	30 16.0 15.5 15.0
18	9.66 148	25	9.71 277	81	0.28 728	9.94 871	6	42	40 21.8 20.7 20.0
19	9.66 173	24	9.71 308	81	0.28 692	9.94 865	7	41	50 26.7 25.8 25.0
20	9.66 197		9.71 339	81	0.28 661	9.94 858	6	40	
21	9.66 221	24	9.71 370	81	0.28 630	9.94 852	7	39	
22	9.66 246	25	9.71 401	80	0.28 599	9.94 845	6	38	25 24 23
23	9.66 270	25	9.71 431	81	0.28 569	9.94 839	7	37	
24	9.66 295	24	9.71 462	81	0.28 538	9.94 832	6	36	
25	9.66 319		9.71 498	81	0.28 507	9.94 826	7	35	1 0.4 0.4 0.4
26	9.66 348	24	9.71 524	81	0.28 476	9.94 819	6	34	2 0.8 0.8 0.8
27	9.66 368	25	9.71 555	81	0.28 445	9.94 813	7	33	3 1.2 1.2 1.2
28	9.66 392	24	9.71 586	81	0.28 414	9.94 806	6	32	4 1.7 1.6 1.5
29	9.66 416	25	9.71 617	81	0.28 388	9.94 799	7	31	
30	9.66 441		9.71 648	81	0.28 352	9.94 798	6	30	5 2.1 2.0 1.9
31	9.66 466	24	9.71 679	80	0.28 321	9.94 786	7	29	6 2.5 2.4 2.3
32	9.66 489	24	9.71 709	81	0.28 291	9.94 780	6	28	7 2.9 2.8 2.7
33	9.66 518	24	9.71 740	81	0.28 260	9.94 773	7	27	8 3.3 3.2 3.1
34	9.66 537	25	9.71 771	81	0.28 229	9.94 767	6	26	9 3.8 3.6 3.4
35	9.66 562		9.71 802	81	0.28 198	9.94 760	7	25	10 4.2 4.0 3.8
36	9.66 586	24	9.71 833	80	0.28 167	9.94 758	6	24	20 8.8 8.0 7.7
37	9.66 610	24	9.71 868	81	0.28 137	9.94 747	7	23	30 12.5 12.0 11.5
38	9.66 634	24	9.71 894	81	0.28 106	9.94 740	6	22	40 16.7 16.0 15.8
39	9.66 658	24	9.71 925	80	0.28 075	9.94 734	7	21	50 20.8 20.0 19.2
40	9.66 682		9.71 955	81	0.28 045	9.94 727	6	20	
41	9.66 706	25	9.71 986	81	0.28 014	9.94 720	7	19	
42	9.66 731	24	9.72 017	81	0.27 988	9.94 714	6	18	7 6
43	9.66 755	24	9.72 048	80	0.27 952	9.94 707	7	17	
44	9.66 779	24	9.72 078	81	0.27 922	9.94 700	6	16	1 0.1 0.1
45	9.66 808		9.72 109	81	0.27 891	9.94 694	7	15	2 0.2 0.2
46	9.66 827	24	9.72 140	80	0.27 860	9.94 687	6	14	3 0.4 0.4
47	9.66 851	24	9.72 170	81	0.27 830	9.94 680	7	13	4 0.5 0.4
48	9.66 875	24	9.72 201	81	0.27 799	9.94 674	6	12	
49	9.66 899	23	9.72 231	80	0.27 769	9.94 667	7	11	5 0.6 0.5
50	9.66 922		9.72 262	81	0.27 738	9.94 660	6	10	6 0.7 0.6
51	9.66 946	24	9.72 293	80	0.27 707	9.94 654	7	9	7 0.8 0.7
52	9.66 970	24	9.72 323	81	0.27 677	9.94 647	6	8	8 0.9 0.8
53	9.66 994	24	9.72 354	80	0.27 646	9.94 640	7	7	9 1.0 0.9
54	9.67 018	24	9.72 384	81	0.27 616	9.94 634	6	6	
55	9.67 042		9.72 415	80	0.27 585	9.94 627	7	5	10 1.2 1.0
56	9.67 066	24	9.72 445	81	0.27 555	9.94 620	6	4	20 2.3 2.0
57	9.67 090	23	9.72 476	80	0.27 524	9.94 614	7	3	30 3.5 3.0
58	9.67 118	24	9.72 506	81	0.27 494	9.94 607	6	2	40 4.7 4.0
59	9.67 137	24	9.72 537	80	0.27 468	9.94 600	7	1	50 5.8 5.0
60	9.67 161		9.72 567		0.27 438	9.94 598		0	
	L. Cos.	d.	L. Cotg.	c.d.	L. Tang.	L. Sin.	d.		P. P.

	L. Sin.	d.	L. Tang.	c.d.	L. Cotg.	L. Cos.	d.		P. P.
0	9.67 161	24	9.72 567	81	0.27 433	9.94 598	6	60	
1	9.67 185	24	9.72 598	80	0.27 402	9.94 567	7	59	
2	9.67 208	24	9.72 628	81	0.27 372	9.94 580	7	58	
3	9.67 233	24	9.72 659	80	0.27 341	9.94 573	7	57	
4	9.67 256	24	9.72 689	81	0.27 311	9.94 567	7	56	81 30 29
5	9.67 280	23	9.72 720	80	0.27 280	9.94 560	7	55	1 0.5 0.5 0.5
6	9.67 308	23	9.72 750	80	0.27 250	9.94 558	7	54	2 1.0 1.0 1.0
7	9.67 327	23	9.72 780	81	0.27 220	9.94 546	7	53	3 1.6 1.5 1.4
8	9.67 350	24	9.72 811	80	0.27 189	9.94 540	7	52	4 2.1 2.0 1.9
9	9.67 374	24	9.72 841	81	0.27 159	9.94 533	7	51	
10	9.67 398	23	9.72 872	80	0.27 128	9.94 526	7	50	5 2.6 2.5 2.4
11	9.67 421	24	9.72 902	80	0.27 098	9.94 519	7	49	6 3.1 3.0 2.9
12	9.67 445	24	9.72 932	81	0.27 068	9.94 518	7	48	7 3.6 3.5 3.4
13	9.67 468	24	9.72 963	80	0.27 037	9.94 506	7	47	8 4.1 4.0 3.9
14	9.67 492	23	9.72 993	80	0.27 007	9.94 499	7	46	9 4.6 4.5 4.4
15	9.67 515	24	9.78 028	81	0.26 977	9.94 492	7	45	10 5.2 5.0 4.8
16	9.67 539	23	9.78 054	80	0.26 946	9.94 485	7	44	20 10.3 10.0 9.7
17	9.67 562	23	9.78 084	80	0.26 916	9.94 479	7	43	30 15.5 15.0 14.5
18	9.67 586	23	9.78 114	80	0.26 886	9.94 472	7	42	40 20.7 20.0 19.8
19	9.67 609	24	9.78 144	81	0.26 856	9.94 465	7	41	50 25.8 25.0 24.2
20	9.67 633	23	9.78 175	80	0.26 825	9.94 458	7	40	
21	9.67 656	24	9.78 205	80	0.26 795	9.94 451	7	39	
22	9.67 680	23	9.78 235	80	0.26 765	9.94 445	7	38	
23	9.67 703	23	9.78 265	80	0.26 735	9.94 438	7	37	24 23 22
24	9.67 726	24	9.78 295	81	0.26 705	9.94 431	7	36	
25	9.67 750	23	9.78 326	80	0.26 674	9.94 424	7	35	1 0.4 0.4 0.4
26	9.67 773	23	9.78 356	80	0.26 644	9.94 417	7	34	2 0.8 0.8 0.7
27	9.67 796	23	9.78 386	80	0.26 614	9.94 410	7	33	3 1.2 1.2 1.1
28	9.67 820	24	9.78 416	80	0.26 584	9.94 404	7	32	4 1.6 1.5 1.4
29	9.67 843	23	9.78 446	80	0.26 554	9.94 397	7	31	
30	9.67 866	24	9.78 476	81	0.26 524	9.94 390	7	30	5 2.0 1.9 1.8
31	9.67 890	23	9.78 507	80	0.26 493	9.94 383	7	29	6 2.4 2.3 2.2
32	9.67 913	23	9.78 537	80	0.26 463	9.94 376	7	28	7 2.8 2.7 2.6
33	9.67 936	23	9.78 567	80	0.26 433	9.94 369	7	27	8 3.2 3.1 2.9
34	9.67 959	23	9.78 597	80	0.26 403	9.94 362	7	26	9 3.6 3.4 3.3
35	9.67 982	24	9.78 627	80	0.26 373	9.94 355	7	25	10 4.0 3.8 3.7
36	9.68 006	23	9.78 657	80	0.26 343	9.94 349	7	24	20 8.0 7.7 7.8
37	9.68 029	23	9.78 687	80	0.26 313	9.94 342	7	23	30 12.0 11.5 11.0
38	9.68 052	23	9.78 717	80	0.26 283	9.94 335	7	22	40 16.0 15.3 14.7
39	9.68 075	23	9.78 747	80	0.26 253	9.94 328	7	21	50 20.0 19.2 18.8
40	9.68 098	23	9.78 777	80	0.26 223	9.94 321	7	20	
41	9.68 121	23	9.78 807	80	0.26 193	9.94 314	7	19	
42	9.68 144	23	9.78 837	80	0.26 163	9.94 307	7	18	
43	9.68 167	23	9.78 867	80	0.26 133	9.94 300	7	17	7 6
44	9.68 190	23	9.78 897	80	0.26 103	9.94 293	7	16	
45	9.68 213	24	9.78 927	80	0.26 073	9.94 286	7	15	1 0.1 0.1 0.1
46	9.68 237	23	9.78 957	80	0.26 043	9.94 279	7	14	2 0.2 0.2 0.2
47	9.68 260	23	9.78 987	80	0.26 013	9.94 273	7	13	3 0.4 0.3 0.3
48	9.68 283	22	9.74 017	80	0.25 983	9.94 266	7	12	4 0.5 0.4 0.4
49	9.68 305	23	9.74 047	80	0.25 953	9.94 259	7	11	
50	9.68 328	23	9.74 077	80	0.25 923	9.94 252	7	10	5 0.6 0.5 0.5
51	9.68 351	23	9.74 107	80	0.25 893	9.94 245	7	9	6 0.7 0.6 0.6
52	9.68 374	23	9.74 137	80	0.25 863	9.94 238	7	8	7 0.8 0.7 0.7
53	9.68 397	23	9.74 166	80	0.25 834	9.94 231	7	7	8 0.9 0.8 0.8
54	9.68 420	23	9.74 196	80	0.25 804	9.94 224	7	6	9 1.0 0.9 0.9
55	9.68 443	23	9.74 226	80	0.25 774	9.94 217	7	5	10 1.2 1.0 1.0
56	9.68 466	23	9.74 256	80	0.25 744	9.94 210	7	4	20 2.3 2.0 2.0
57	9.68 489	23	9.74 286	80	0.25 714	9.94 203	7	3	30 3.5 3.0 3.0
58	9.68 512	22	9.74 316	80	0.25 684	9.94 196	7	2	40 4.7 4.0 4.0
59	9.68 534	23	9.74 345	80	0.25 655	9.94 189	7	1	50 5.8 5.0 5.0
60	9.68 557		9.74 375		0.25 625	9.94 182		0	
	L. Cos.	d.	L. Cotg.	c.d.	L. Tang.	L. Sin.	d.		P. P.

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	L. Sin.	d.	L. Tang.	c.d.	L. Cotg.	L. Cos.	d.		P. P.
0	9.68 557	23	9.74 875	30	0.25 625	9.94 182	7	60	
1	9.68 580	23	9.74 405	30	0.25 595	9.94 175	7	59	
2	9.68 603	22	9.74 485	30	0.25 565	9.94 168	7	58	
3	9.68 625	22	9.74 465	29	0.25 535	9.94 161	7	57	
4	9.68 648	23	9.74 494	30	0.25 506	9.94 154	7	56	
5	9.68 671	23	9.74 524	30	0.25 476	9.94 147	7	55	
6	9.68 694	22	9.74 554	29	0.25 446	9.94 140	7	54	
7	9.68 716	23	9.74 583	30	0.25 417	9.94 133	7	53	
8	9.68 739	23	9.74 618	30	0.25 387	9.94 126	7	52	
9	9.68 762	22	9.74 648	30	0.25 357	9.94 119	7	51	
10	9.68 784	23	9.74 678	29	0.25 327	9.94 112	7	50	80 20 23
11	9.68 807	22	9.74 702	30	0.25 298	9.94 105	7	49	1 0.5 0.5 0.4
12	9.68 829	22	9.74 732	30	0.25 268	9.94 098	7	48	2 1.0 1.0 0.8
13	9.68 852	23	9.74 762	29	0.25 238	9.94 090	7	47	3 1.5 1.4 1.2
14	9.68 875	22	9.74 791	30	0.25 209	9.94 088	7	46	4 2.0 1.9 1.5
15	9.68 897	23	9.74 821	30	0.25 179	9.94 076	7	45	5 2.5 2.4 1.9
16	9.68 920	22	9.74 851	29	0.25 149	9.94 069	7	44	6 3.0 2.9 2.8
17	9.68 942	23	9.74 880	30	0.25 120	9.94 062	7	43	7 3.5 3.4 2.7
18	9.68 965	22	9.74 910	29	0.25 090	9.94 055	7	42	8 4.0 3.9 8.1
19	9.68 987	23	9.74 939	30	0.25 061	9.94 048	7	41	9 4.5 4.4 8.4
20	9.69 010	22	9.74 969	29	0.25 031	9.94 041	7	40	10 5.0 4.8 8.8
21	9.69 032	23	9.74 998	30	0.25 002	9.94 034	7	39	20 10.0 9.7 7.7
22	9.69 055	22	9.75 028	30	0.24 972	9.94 027	7	38	30 15.0 14.5 11.5
23	9.69 077	23	9.75 058	29	0.24 942	9.94 020	8	37	40 20.0 19.8 15.8
24	9.69 100	22	9.75 087	30	0.24 913	9.94 012	7	36	50 25.0 24.3 19.2
25	9.69 122	23	9.75 117	29	0.24 888	9.94 005	7	35	
26	9.69 144	23	9.75 146	30	0.24 854	9.93 998	7	34	
27	9.69 167	22	9.75 176	29	0.24 824	9.93 991	7	33	
28	9.69 189	23	9.75 205	30	0.24 795	9.93 984	7	32	
29	9.69 212	22	9.75 235	29	0.24 765	9.93 977	7	31	
30	9.69 234	22	9.75 264	30	0.24 736	9.93 970	7	30	
31	9.69 256	23	9.75 294	29	0.24 706	9.93 963	8	29	
32	9.69 279	22	9.75 323	30	0.24 677	9.93 955	7	28	
33	9.69 301	23	9.75 353	29	0.24 647	9.93 948	7	27	
34	9.69 323	22	9.75 382	30	0.24 618	9.93 941	7	26	
35	9.69 345	23	9.75 411	29	0.24 589	9.93 934	7	25	22 8 7
36	9.69 368	22	9.75 441	29	0.24 559	9.93 927	7	24	
37	9.69 390	23	9.75 470	30	0.24 530	9.93 920	8	23	1 0.4 0.1 0.1
38	9.69 412	22	9.75 500	29	0.24 500	9.93 912	7	22	2 0.7 0.8 0.2
39	9.69 434	23	9.75 529	30	0.24 471	9.93 905	7	21	3 1.1 0.4 0.4
40	9.69 456	22	9.75 558	29	0.24 442	9.93 898	7	20	4 1.5 0.5 0.5
41	9.69 479	23	9.75 588	29	0.24 412	9.93 891	7	19	
42	9.69 501	22	9.75 617	30	0.24 383	9.93 884	8	18	5 1.8 0.7 0.6
43	9.69 523	23	9.75 647	29	0.24 353	9.93 876	7	17	6 2.2 0.8 0.7
44	9.69 545	22	9.75 676	30	0.24 324	9.93 869	7	16	7 2.6 0.9 0.8
45	9.69 567	23	9.75 705	29	0.24 295	9.93 862	7	15	8 2.9 1.1 0.9
46	9.69 589	22	9.75 735	30	0.24 265	9.93 855	8	14	9 3.8 1.2 1.0
47	9.69 611	23	9.75 764	29	0.24 236	9.93 847	7	13	10 3.7 1.8 1.2
48	9.69 633	22	9.75 793	29	0.24 207	9.93 840	7	12	20 7.8 2.7 2.8
49	9.69 655	23	9.75 822	30	0.24 178	9.93 833	7	11	30 11.0 4.0 3.5
50	9.69 677	22	9.75 852	29	0.24 148	9.93 826	7	10	40 14.7 5.8 4.7
51	9.69 699	23	9.75 881	29	0.24 119	9.93 819	8	9	50 18.8 6.7 5.8
52	9.69 721	22	9.75 910	29	0.24 090	9.93 811	7	8	
53	9.69 743	23	9.75 939	30	0.24 061	9.93 804	7	7	
54	9.69 765	22	9.75 969	29	0.24 031	9.93 797	8	6	
55	9.69 787	23	9.75 998	29	0.24 002	9.93 789	7	5	
56	9.69 809	22	9.76 027	29	0.23 973	9.93 782	7	4	
57	9.69 831	23	9.76 056	30	0.23 944	9.93 775	7	3	
58	9.69 853	22	9.76 086	29	0.23 914	9.93 768	8	2	
59	9.69 875	23	9.76 115	29	0.23 885	9.93 760	7	1	
60	9.69 897		9.76 144		0.23 856	9.93 753		0	
	L. Cos.	d.	L. Cotg.	c.d.	L. Tang.	L. Sin.	d.		P. P.

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	L. Sin.	d.	L. Tang.	c.d.	L. Cotg.	L. Cos.	d.		P. P.
0	9.69 897	22	9.76 144	29	0.28 856	9.93 753	7	60	
1	9.69 919	22	9.76 173	29	0.28 827	9.93 746	8	59	
2	9.69 941	22	9.76 202	29	0.28 798	9.93 738	9	58	
3	9.69 963	21	9.76 231	30	0.28 769	9.93 731	10	57	
4	9.69 984	22	9.76 261	29	0.28 739	9.93 724	11	56	
5	9.70 006	23	9.76 290	29	0.28 710	9.93 717	12	55	
6	9.70 023	22	9.76 319	29	0.28 681	9.93 709	13	54	
7	9.70 050	22	9.76 348	29	0.28 652	9.93 702	14	53	
8	9.70 072	21	9.76 377	29	0.28 623	9.93 695	15	52	
9	9.70 093	22	9.76 406	29	0.28 594	9.93 687	16	51	
10	9.70 115	22	9.76 435	29	0.28 565	9.93 680	17	50	
11	9.70 137	22	9.76 464	29	0.28 536	9.93 673	18	49	
12	9.70 159	21	9.76 493	29	0.28 507	9.93 665	19	48	
13	9.70 180	22	9.76 522	29	0.28 478	9.93 658	20	47	
14	9.70 202	23	9.76 551	29	0.28 449	9.93 650	21	46	
15	9.70 224	21	9.76 580	29	0.28 420	9.93 643	22	45	
16	9.70 245	22	9.76 609	30	0.28 391	9.93 636	23	44	
17	9.70 267	21	9.76 639	29	0.28 361	9.93 628	24	43	
18	9.70 288	22	9.76 668	29	0.28 332	9.93 621	25	42	
19	9.70 310	23	9.76 697	28	0.28 303	9.93 614	26	41	
20	9.70 332	21	9.76 725	29	0.28 275	9.93 606	27	40	
21	9.70 353	22	9.76 754	29	0.28 246	9.93 599	28	39	
22	9.70 375	21	9.76 783	29	0.28 217	9.93 591	29	38	
23	9.70 396	22	9.76 812	29	0.28 188	9.93 584	30	37	
24	9.70 418	21	9.76 841	29	0.28 159	9.93 577	31	36	
25	9.70 439	22	9.76 870	29	0.28 130	9.93 569	32	35	
26	9.70 461	21	9.76 899	29	0.28 101	9.93 562	33	34	
27	9.70 482	22	9.76 928	29	0.28 072	9.93 554	34	33	
28	9.70 504	21	9.76 957	29	0.28 043	9.93 547	35	32	
29	9.70 525	22	9.76 986	29	0.28 014	9.93 539	36	31	
30	9.70 547	21	9.77 015	29	0.28 985	9.93 532	37	30	
31	9.70 568	22	9.77 044	29	0.28 956	9.93 525	38	29	
32	9.70 590	21	9.77 073	28	0.28 927	9.93 517	39	28	
33	9.70 611	22	9.77 101	29	0.28 899	9.93 510	40	27	
34	9.70 633	21	9.77 130	29	0.28 870	9.93 502	41	26	
35	9.70 654	22	9.77 159	29	0.28 841	9.93 495	42	25	
36	9.70 675	21	9.77 188	29	0.28 812	9.93 487	43	24	
37	9.70 697	22	9.77 217	29	0.28 783	9.93 480	44	23	
38	9.70 718	21	9.77 246	28	0.28 754	9.93 472	45	22	
39	9.70 739	22	9.77 274	29	0.28 726	9.93 465	46	21	
40	9.70 761	21	9.77 303	29	0.28 697	9.93 457	47	20	
41	9.70 782	22	9.77 332	29	0.28 668	9.93 450	48	19	
42	9.70 803	21	9.77 361	29	0.28 639	9.93 442	49	18	
43	9.70 824	22	9.77 390	28	0.28 610	9.93 435	50	17	
44	9.70 846	21	9.77 418	29	0.28 582	9.93 427	1	16	
45	9.70 867	22	9.77 447	29	0.28 553	9.93 420	2	15	
46	9.70 888	21	9.77 476	29	0.28 524	9.93 412	3	14	
47	9.70 909	22	9.77 505	28	0.28 495	9.93 405	4	13	
48	9.70 931	21	9.77 533	29	0.28 467	9.93 397	5	12	
49	9.70 952	22	9.77 562	29	0.28 438	9.93 390	6	11	
50	9.70 973	21	9.77 591	28	0.28 409	9.93 382	7	10	
51	9.70 994	22	9.77 619	29	0.28 381	9.93 375	8	9	
52	9.71 015	21	9.77 648	29	0.28 352	9.93 367	9	8	
53	9.71 036	22	9.77 677	29	0.28 323	9.93 360	10	7	
54	9.71 058	21	9.77 706	28	0.28 294	9.93 352	11	6	
55	9.71 079	22	9.77 734	29	0.28 266	9.93 344	12	5	
56	9.71 100	21	9.77 763	29	0.28 237	9.93 337	13	4	
57	9.71 121	22	9.77 791	29	0.28 209	9.93 329	14	3	
58	9.71 142	21	9.77 820	29	0.28 180	9.93 322	15	2	
59	9.71 163	22	9.77 849	28	0.28 151	9.93 314	16	1	
60	9.71 184		9.77 877		0.28 123	9.93 307	17	0	
	L. Cos.	d.	L. Cotg.	c.d.	L. Tang.	L. Sin.	d.		P. P.

	L. Sin.	d.	L. Tang.	c.d.	L. Cotg.	L. Cos.	d.		P. P.
0	9.71 184	21	9.77 877	29	0.22 123	9.98 807	8	60	
1	9.71 205	21	9.77 906	29	0.22 094	9.98 299	8	59	
2	9.71 226	21	9.77 935	29	0.22 065	9.98 291	8	58	
3	9.71 247	21	9.77 968	28	0.22 087	9.98 284	8	57	
4	9.71 268	21	9.77 992	28	0.22 008	9.98 276	8	56	
5	9.71 289	21	9.78 020	29	0.21 980	9.98 269	8	55	
6	9.71 310	21	9.78 049	28	0.21 951	9.98 261	8	54	
7	9.71 331	21	9.78 077	29	0.21 923	9.98 258	8	53	
8	9.71 352	21	9.78 106	29	0.21 894	9.98 246	8	52	
9	9.71 378	20	9.78 135	28	0.21 865	9.98 238	8	51	
10	9.71 398	21	9.78 163	29	0.21 837	9.98 230	8	50	
11	9.71 414	21	9.78 192	28	0.21 808	9.98 228	8	49	
12	9.71 435	21	9.78 220	29	0.21 790	9.98 215	8	48	
13	9.71 456	21	9.78 249	29	0.21 751	9.98 207	8	47	
14	9.71 477	21	9.78 277	29	0.21 723	9.98 200	8	46	
15	9.71 493	21	9.78 306	28	0.21 694	9.98 192	8	45	
16	9.71 519	20	9.78 334	29	0.21 666	9.98 184	8	44	
17	9.71 539	21	9.78 363	28	0.21 637	9.98 177	8	43	
18	9.71 560	21	9.78 391	29	0.21 609	9.98 169	8	42	
19	9.71 581	21	9.78 419	29	0.21 581	9.98 161	8	41	
20	9.71 602	20	9.78 448	28	0.21 552	9.98 154	8	40	
21	9.71 622	21	9.78 476	29	0.21 524	9.98 146	8	39	
22	9.71 643	21	9.78 505	28	0.21 495	9.98 138	8	38	
23	9.71 664	21	9.78 533	29	0.21 467	9.98 131	8	37	
24	9.71 685	20	9.78 562	28	0.21 438	9.98 123	8	36	
25	9.71 705	21	9.78 590	29	0.21 410	9.98 115	8	35	
26	9.71 726	21	9.78 618	29	0.21 382	9.98 108	8	34	
27	9.71 747	20	9.78 647	28	0.21 353	9.98 100	8	33	
28	9.71 767	21	9.78 675	29	0.21 325	9.98 092	8	32	
29	9.71 783	21	9.78 704	28	0.21 296	9.98 084	8	31	
30	9.71 809	20	9.78 732	29	0.21 268	9.98 077	8	30	
31	9.71 829	21	9.78 760	29	0.21 240	9.98 069	8	29	
32	9.71 850	20	9.78 789	28	0.21 211	9.98 061	8	28	
33	9.71 870	21	9.78 817	29	0.21 183	9.98 053	8	27	
34	9.71 891	20	9.78 845	29	0.21 155	9.98 046	8	26	
35	9.71 911	21	9.78 874	28	0.21 126	9.98 038	8	25	
36	9.71 932	21	9.78 902	29	0.21 099	9.98 030	8	24	
37	9.71 952	21	9.78 930	29	0.21 070	9.98 022	8	23	
38	9.71 973	21	9.78 959	28	0.21 041	9.98 014	8	22	
39	9.71 994	20	9.78 987	29	0.21 013	9.98 007	8	21	
40	9.72 014	20	9.79 015	29	0.20 985	9.92 999	8	20	
41	9.72 034	21	9.79 043	29	0.20 957	9.92 991	8	19	
42	9.72 055	21	9.79 072	28	0.20 928	9.92 983	8	18	
43	9.72 075	21	9.79 100	29	0.20 900	9.92 976	8	17	
44	9.72 096	20	9.79 123	28	0.20 872	9.92 968	8	16	
45	9.72 116	21	9.79 156	29	0.20 844	9.92 960	8	15	
46	9.72 137	21	9.79 185	28	0.20 815	9.92 952	8	14	
47	9.72 157	20	9.79 213	29	0.20 787	9.92 944	8	13	
48	9.72 177	21	9.79 241	29	0.20 759	9.92 936	8	12	
49	9.72 193	20	9.79 269	28	0.20 731	9.92 929	8	11	
50	9.72 218	20	9.79 297	29	0.20 703	9.92 921	8	10	
51	9.72 238	21	9.79 326	28	0.20 674	9.92 913	8	9	
52	9.72 259	20	9.79 354	29	0.20 646	9.92 905	8	8	
53	9.72 279	21	9.79 382	28	0.20 618	9.92 897	8	7	
54	9.72 299	21	9.79 410	29	0.20 590	9.92 889	8	6	
55	9.72 320	20	9.79 438	28	0.20 562	9.92 881	8	5	
56	9.72 340	20	9.79 466	29	0.20 534	9.92 874	8	4	
57	9.72 360	21	9.79 495	28	0.20 505	9.92 866	8	3	
58	9.72 381	21	9.79 523	29	0.20 477	9.92 858	8	2	
59	9.72 401	20	9.79 551	28	0.20 449	9.92 850	8	1	
60	9.72 421		9.79 579		0.20 421	9.92 842		0	
	L. Cos.	d.	L. Cotg.	c.d.	L. Tang.	L. Sin.	d.		P. P.

	L. Sin.	d.	L. Tang.	e.d.	L. Cotg.	L. Cos.	d.		P. P.
0	9.72 421	20	9.79 579	23	0.20 421	9.92 842	8	60	
1	9.72 441	20	9.79 607	23	0.20 893	9.92 884	8	59	
2	9.72 461	21	9.79 635	23	0.20 865	9.92 826	8	58	
3	9.72 482	20	9.79 663	23	0.20 837	9.92 818	8	57	
4	9.72 502	20	9.79 691	23	0.20 809	9.92 810	7	56	29 28 27
5	9.72 522	20	9.79 719	23	0.20 281	9.92 808	8	55	1 2 0.5 0.5 0.4
6	9.72 542	20	9.79 747	23	0.20 258	9.92 795	8	54	8 1.0 0.9 0.9
7	9.72 562	20	9.79 776	23	0.20 224	9.92 787	8	53	8 1.4 1.4 1.4
8	9.72 582	20	9.79 804	23	0.20 196	9.92 779	8	52	4 1.9 1.9 1.8
9	9.72 602	20	9.79 832	23	0.20 168	9.92 771	8	51	5 2.4 2.8 2.2
10	9.72 622	21	9.79 860	23	0.20 140	9.92 768	8	50	6 2.9 2.8 2.7
11	9.72 643	21	9.79 888	23	0.20 112	9.92 755	8	49	7 3.4 3.8 3.2
12	9.72 663	20	9.79 916	23	0.20 084	9.92 747	8	48	8 3.9 3.7 3.6
13	9.72 683	20	9.79 944	23	0.20 056	9.92 739	8	47	9 4.4 4.2 4.0
14	9.72 703	20	9.79 972	23	0.20 028	9.92 731	8	46	10 4.8 4.7 4.5
15	9.72 723	20	9.80 000	23	0.20 000	9.92 723	8	45	20 9.7 9.8 9.0
16	9.72 743	20	9.80 028	23	0.19 973	9.92 715	8	44	80 14.5 14.0 13.5
17	9.72 763	20	9.80 056	23	0.19 944	9.92 707	8	43	40 19.3 18.7 18.0
18	9.72 783	20	9.80 084	23	0.19 916	9.92 699	8	42	50 24.2 23.8 22.5
19	9.72 803	20	9.80 112	23	0.19 888	9.92 691	8	41	
20	9.72 823	20	9.80 140	23	0.19 860	9.92 683	8	40	
21	9.72 843	20	9.80 168	27	0.19 832	9.92 675	8	39	
22	9.72 863	20	9.80 195	23	0.19 805	9.92 667	8	38	
23	9.72 883	19	9.80 223	23	0.19 777	9.92 659	8	37	21 20 19
24	9.72 902	20	9.80 251	23	0.19 749	9.92 651	8	36	1 0.4 0.8 0.8
25	9.72 922	20	9.80 279	23	0.19 721	9.92 643	8	35	2 0.7 0.7 0.6
26	9.72 942	20	9.80 307	23	0.19 693	9.92 635	8	34	3 1.0 1.0 1.0
27	9.72 962	20	9.80 335	23	0.19 665	9.92 627	8	33	4 1.4 1.8 1.3
28	9.72 982	20	9.80 363	23	0.19 637	9.92 619	8	32	
29	9.73 002	20	9.80 391	23	0.19 609	9.92 611	8	31	5 1.8 1.7 1.6
30	9.73 022	19	9.80 419	23	0.19 581	9.92 603	8	30	6 2.1 2.0 1.9
31	9.73 041	20	9.80 447	27	0.19 553	9.92 595	8	29	7 2.4 2.8 2.2
32	9.73 061	20	9.80 474	23	0.19 526	9.92 587	8	28	8 2.8 2.7 2.5
33	9.73 081	20	9.80 502	23	0.19 498	9.92 579	8	27	9 3.2 3.0 2.8
34	9.73 101	20	9.80 530	23	0.19 470	9.92 571	8	26	10 3.5 3.8 3.2
35	9.73 121	19	9.80 558	23	0.19 442	9.92 563	8	25	20 7.0 6.7 6.8
36	9.73 140	20	9.80 586	23	0.19 414	9.92 555	8	24	80 10.5 10.0 9.5
37	9.73 160	20	9.80 614	23	0.19 386	9.92 546	8	23	40 14.0 13.8 12.7
38	9.73 180	20	9.80 642	27	0.19 358	9.92 538	8	22	50 17.5 16.7 15.8
39	9.73 200	19	9.80 669	23	0.19 331	9.92 530	8	21	
40	9.73 219	20	9.80 697	23	0.19 303	9.92 522	8	20	
41	9.73 239	20	9.80 725	23	0.19 275	9.92 514	8	19	
42	9.73 259	20	9.80 753	23	0.19 247	9.92 506	8	18	9 8 7
43	9.73 278	19	9.80 781	23	0.19 219	9.92 498	8	17	
44	9.73 298	20	9.80 808	23	0.19 192	9.92 490	8	16	1 0.2 0.1 0.1
45	9.73 318	19	9.80 836	23	0.19 164	9.92 482	9	15	2 0.3 0.3 0.2
46	9.73 337	20	9.80 864	23	0.19 136	9.92 473	9	14	3 0.4 0.4 0.4
47	9.73 357	20	9.80 892	27	0.19 108	9.92 465	8	13	4 0.6 0.5 0.5
48	9.73 377	19	9.80 919	23	0.19 081	9.92 457	8	12	5 0.8 0.7 0.6
49	9.73 396	20	9.80 947	23	0.19 053	9.92 449	8	11	6 0.9 0.8 0.7
50	9.73 416	19	9.80 975	23	0.19 025	9.92 441	8	10	7 1.0 0.9 0.8
51	9.73 435	20	9.81 003	27	0.18 997	9.92 433	8	9	8 1.2 1.1 0.9
52	9.73 455	19	9.81 030	23	0.18 970	9.92 425	8	8	9 1.4 1.2 1.0
53	9.73 474	20	9.81 058	23	0.18 942	9.92 416	8	7	10 1.5 1.8 1.2
54	9.73 494	19	9.81 086	27	0.18 914	9.92 408	8	6	20 3.0 2.7 2.8
55	9.73 513	20	9.81 113	23	0.18 887	9.92 400	8	5	30 4.5 4.0 3.5
56	9.73 533	19	9.81 141	23	0.18 859	9.92 392	8	4	40 6.0 5.8 4.7
57	9.73 552	20	9.81 169	27	0.18 831	9.92 384	8	3	50 7.5 6.7 5.8
58	9.73 572	19	9.81 196	23	0.18 804	9.92 376	8	2	
59	9.73 591	20	9.81 224	23	0.18 776	9.92 367	8	1	
60	9.73 611		9.81 252		0.18 748	9.92 359		0	
	L. Cos.	d.	L. Cotg.	e.d.	L. Tang.	L. Sin.	d.		P. P.



	L. Sin.	d.	L. Tang.	c.d.	L. Cotg.	L. Cos.	d.		P. P.
0	9.73 611	19	9.81 252	27	0.18 748	9.92 859	8	60	
1	9.73 680	20	9.81 279	28	0.18 721	9.92 851	8	59	
2	9.73 650	19	9.81 807	28	0.18 698	9.92 848	8	58	
3	9.73 669	20	9.81 885	27	0.18 665	9.92 885	9	57	
4	9.73 689	19	9.81 862	28	0.18 688	9.92 826	8	56	28 27
5	9.73 708	19	9.81 890	28	0.18 610	9.92 818	8	55	1 0.5 0.4
6	9.73 727	20	9.81 418	27	0.18 582	9.92 910	8	54	2 0.9 0.9
7	9.73 747	19	9.81 445	23	0.18 555	9.92 802	9	53	3 1.4 1.4
8	9.73 766	19	9.81 473	27	0.18 527	9.92 298	8	52	4 1.9 1.8
9	9.73 785	20	9.81 500	28	0.18 500	9.92 285	8	51	5 2.3 2.2
10	9.73 805	19	9.81 528	28	0.18 472	9.92 277	8	50	6 2.8 2.7
11	9.73 824	19	9.81 556	27	0.18 444	9.92 269	9	49	7 3.2 3.2
12	9.73 843	20	9.81 583	28	0.18 417	9.92 260	8	48	8 3.6 3.6
13	9.73 868	19	9.81 611	27	0.18 389	9.92 252	8	47	9 4.2 4.0
14	9.73 882	19	9.81 638	28	0.18 362	9.92 244	9	46	10 4.7 4.5
15	9.73 901	20	9.81 666	27	0.18 334	9.92 235	8	45	20 9.8 9.0
16	9.73 921	19	9.81 698	28	0.18 307	9.92 227	8	44	30 14.0 13.5
17	9.73 940	19	9.81 721	27	0.18 279	9.92 219	8	43	40 18.7 18.0
18	9.73 959	19	9.81 748	28	0.18 252	9.92 211	9	42	50 23.8 22.5
19	9.73 978	19	9.81 776	27	0.18 224	9.92 202	8	41	
20	9.73 997	20	9.81 808	28	0.18 197	9.92 194	8	40	
21	9.74 017	19	9.81 881	27	0.18 169	9.92 186	9	39	
22	9.74 036	19	9.81 858	28	0.18 142	9.92 177	8	38	20 19 18
23	9.74 055	19	9.81 886	27	0.18 114	9.92 169	8	37	
24	9.74 074	19	9.81 918	28	0.18 087	9.92 161	9	36	
25	9.74 093	20	9.81 941	27	0.18 059	9.92 152	8	35	1 0.8 0.8
26	9.74 118	19	9.81 968	28	0.18 032	9.92 144	8	34	2 0.7 0.6
27	9.74 122	19	9.81 996	27	0.18 004	9.92 136	9	33	3 1.0 1.0
28	9.74 151	19	9.82 028	28	0.17 977	9.92 127	8	32	4 1.3 1.2
29	9.74 170	19	9.82 051	27	0.17 949	9.92 119	8	31	5 1.7 1.6
30	9.74 189	19	9.82 078	28	0.17 922	9.92 111	9	30	6 2.0 1.9
31	9.74 208	19	9.82 106	27	0.17 894	9.92 102	8	29	7 2.3 2.2
32	9.74 227	19	9.82 138	28	0.17 867	9.92 094	8	28	8 2.6 2.5
33	9.74 246	19	9.82 161	27	0.17 839	9.92 086	9	27	9 3.0 2.8
34	9.74 265	19	9.82 188	27	0.17 812	9.92 077	8	26	10 3.3 3.2
35	9.74 284	19	9.82 215	28	0.17 785	9.92 069	9	25	20 6.7 6.8
36	9.74 308	19	9.82 248	27	0.17 757	9.92 060	8	24	30 10.0 9.5
37	9.74 322	19	9.82 270	28	0.17 730	9.92 052	8	23	40 13.8 12.7
38	9.74 341	19	9.82 298	27	0.17 703	9.92 044	9	22	50 16.7 15.8
39	9.74 360	19	9.82 325	27	0.17 675	9.92 035	8	21	
40	9.74 379	19	9.82 352	28	0.17 648	9.92 027	9	20	
41	9.74 398	19	9.82 380	27	0.17 620	9.92 018	8	19	9 8
42	9.74 417	19	9.82 407	28	0.17 593	9.92 010	8	18	1 0.2 0.1
43	9.74 436	19	9.82 435	27	0.17 565	9.92 002	9	17	2 0.3 0.3
44	9.74 455	19	9.82 462	27	0.17 538	9.91 993	8	16	3 0.4 0.4
45	9.74 474	19	9.82 489	28	0.17 511	9.91 985	9	15	4 0.6 0.5
46	9.74 498	19	9.82 517	27	0.17 483	9.91 976	8	14	
47	9.74 512	19	9.82 544	27	0.17 456	9.91 968	9	13	5 0.8 0.7
48	9.74 531	18	9.82 571	28	0.17 429	9.91 959	8	12	6 0.9 0.8
49	9.74 549	19	9.82 599	27	0.17 401	9.91 951	9	11	7 1.0 0.9
50	9.74 568	19	9.82 626	27	0.17 374	9.91 942	8	10	8 1.2 1.1
51	9.74 587	19	9.82 658	28	0.17 347	9.91 934	9	9	9 1.4 1.2
52	9.74 606	19	9.82 681	27	0.17 319	9.91 925	8	8	
53	9.74 625	19	9.82 708	27	0.17 292	9.91 917	9	7	10 1.5 1.3
54	9.74 644	18	9.82 735	27	0.17 265	9.91 908	8	6	20 3.0 2.7
55	9.74 662	19	9.82 762	28	0.17 238	9.91 900	9	5	30 4.5 4.0
56	9.74 681	19	9.82 790	27	0.17 210	9.91 891	8	4	40 6.0 5.3
57	9.74 700	19	9.82 817	27	0.17 183	9.91 883	9	3	50 7.5 6.7
58	9.74 719	18	9.82 844	27	0.17 156	9.91 874	8	2	
59	9.74 737	19	9.82 871	28	0.17 129	9.91 866	9	1	
60	9.74 756		9.82 899		0.17 101	9.91 857		0	
	L. Cos.	d.	L. Cotg.	c.d.	L. Tang.	L. Sin.	d.		P. P.

	L. Sin.	d.	L. Tang.	c.d.	L. Cotg.	L. Cos.	d.		P. P.
0	9.74 756		9.82 999		0.17 101	9.91 657		60	
1	9.74 775	19	9.82 926	27	0.17 074	9.91 649	8	59	
2	9.74 794	19	9.82 958	27	0.17 047	9.91 640	8	58	
3	9.74 812	18	9.82 980	28	0.17 020	9.91 632	8	57	
4	9.74 831	19	9.83 008	27	0.16 992	9.91 623	8	56	
5	9.74 850	18	9.83 035	27	0.16 965	9.91 615	9	55	1 0.5 0.4 0.4
6	9.74 868	19	9.83 062	27	0.16 938	9.91 606	9	54	2 0.9 0.9 0.9
7	9.74 887	19	9.83 089	28	0.16 911	9.91 598	9	53	3 1.4 1.4 1.8
8	9.74 906	18	9.83 117	27	0.16 883	9.91 589	8	52	4 1.9 1.8 1.7
9	9.74 924	19	9.83 144	27	0.16 856	9.91 581	9	51	5 2.3 2.2 2.2
10	9.74 943	18	9.83 171	27	0.16 829	9.91 572	9	50	6 2.8 2.7 2.6
11	9.74 961	19	9.83 198	27	0.16 802	9.91 563	9	49	7 3.3 3.2 3.0
12	9.74 980	19	9.83 225	27	0.16 775	9.91 555	9	48	8 3.7 3.6 3.5
13	9.74 999	18	9.83 252	28	0.16 748	9.91 546	8	47	9 4.2 4.0 3.9
14	9.75 017	19	9.83 280	27	0.16 720	9.91 538	9	46	10 4.7 4.5 4.3
15	9.75 036	18	9.83 307	27	0.16 693	9.91 529	9	45	20 9.8 9.0 8.7
16	9.75 054	19	9.83 334	27	0.16 666	9.91 520	9	44	30 14.0 13.5 13.0
17	9.75 073	18	9.83 361	27	0.16 639	9.91 512	9	43	40 18.7 18.0 17.8
18	9.75 091	19	9.83 388	27	0.16 612	9.91 503	8	42	50 23.8 22.5 21.7
19	9.75 110	18	9.83 415	27	0.16 585	9.91 495	9	41	
20	9.75 128	19	9.83 442	28	0.16 558	9.91 486	9	40	
21	9.75 147	18	9.83 470	27	0.16 530	9.91 477	8	39	
22	9.75 165	19	9.83 497	27	0.16 503	9.91 469	9	38	
23	9.75 184	18	9.83 524	27	0.16 476	9.91 460	9	37	
24	9.75 202	19	9.83 551	27	0.16 449	9.91 451	8	36	
25	9.75 221	18	9.83 578	27	0.16 422	9.91 443	9	35	
26	9.75 239	19	9.83 605	27	0.16 395	9.91 434	9	34	
27	9.75 258	18	9.83 632	27	0.16 368	9.91 425	8	33	
28	9.75 276	19	9.83 659	27	0.16 341	9.91 417	9	32	
29	9.75 294	18	9.83 686	27	0.16 314	9.91 408	9	31	
30	9.75 313	19	9.83 713	28	0.16 287	9.91 399	8	30	
31	9.75 331	18	9.83 740	28	0.16 260	9.91 391	9	29	
32	9.75 350	19	9.83 768	27	0.16 232	9.91 382	9	28	
33	9.75 368	18	9.83 795	27	0.16 205	9.91 373	8	27	
34	9.75 386	19	9.83 822	27	0.16 178	9.91 365	9	26	
35	9.75 405	18	9.83 849	27	0.16 151	9.91 356	9	25	
36	9.75 423	19	9.83 876	27	0.16 124	9.91 347	9	24	
37	9.75 441	18	9.83 903	27	0.16 097	9.91 338	8	23	
38	9.75 459	19	9.83 930	27	0.16 070	9.91 330	9	22	
39	9.75 478	18	9.83 957	27	0.16 043	9.91 321	9	21	
40	9.75 496	19	9.83 984	27	0.16 016	9.91 312	8	20	
41	9.75 514	18	9.84 011	27	0.15 989	9.91 304	9	19	
42	9.75 533	19	9.84 038	27	0.15 962	9.91 295	9	18	
43	9.75 551	18	9.84 065	27	0.15 935	9.91 286	9	17	
44	9.75 569	19	9.84 092	27	0.15 908	9.91 277	8	16	
45	9.75 587	18	9.84 119	27	0.15 881	9.91 269	9	15	
46	9.75 605	19	9.84 146	27	0.15 854	9.91 260	9	14	
47	9.75 624	18	9.84 173	27	0.15 827	9.91 251	9	13	
48	9.75 642	19	9.84 200	27	0.15 800	9.91 242	9	12	
49	9.75 660	18	9.84 227	27	0.15 773	9.91 233	8	11	
50	9.75 678	19	9.84 254	26	0.15 746	9.91 225	9	10	
51	9.75 696	18	9.84 280	27	0.15 720	9.91 216	9	9	
52	9.75 714	19	9.84 307	27	0.15 693	9.91 207	9	8	
53	9.75 733	18	9.84 334	27	0.15 666	9.91 198	9	7	
54	9.75 751	19	9.84 361	27	0.15 639	9.91 189	8	6	
55	9.75 769	18	9.84 388	27	0.15 612	9.91 181	9	5	
56	9.75 787	19	9.84 415	27	0.15 585	9.91 172	9	4	
57	9.75 805	18	9.84 442	27	0.15 558	9.91 163	9	3	
58	9.75 823	19	9.84 469	27	0.15 531	9.91 154	9	2	
59	9.75 841	18	9.84 496	27	0.15 504	9.91 145	9	1	
60	9.75 859		9.84 523		0.15 477	9.91 136		0	
	L. Cos.	d.	L. Cotg.	c.d.	L. Tang.	L. Sin.	d.		P. P.

	L. Stn.	d.	L. Tang.	c.d.	L. Cotg.	L. Cos.	d.		P. P.			
0	9.75 859		9.84 528		0.15 477	9.91 886		60				
1	9.75 877	18	9.84 550	27	0.15 450	9.91 828	8	59				
2	9.75 895	18	9.84 576	26	0.15 424	9.91 819	9	58				
3	9.75 918	18	9.84 608	27	0.15 397	9.91 810	9	57				
4	9.75 981	18	9.84 680	27	0.15 370	9.91 801	9	56				
5	9.75 949		9.84 657		0.15 343	9.91 792		55				
6	9.75 967	18	9.84 684	27	0.15 316	9.91 783	9	54				
7	9.75 985	18	9.84 711	27	0.15 289	9.91 774	9	53				
8	9.76 008	18	9.84 738	27	0.15 262	9.91 766	8	52				
9	9.76 021	18	9.84 764	26	0.15 236	9.91 757	9	51				
10	9.76 089		9.84 791		0.15 209	9.91 748		50				
11	9.76 057	18	9.84 818	27	0.15 182	9.91 739	9	49				
12	9.76 075	18	9.84 845	27	0.15 155	9.91 730	9	48				
13	9.76 098	18	9.84 872	27	0.15 128	9.91 721	9	47				
14	9.76 111	18	9.84 899	26	0.15 101	9.91 712	9	46				
15	9.76 129		9.84 925		0.15 075	9.91 703		45				
16	9.76 146	17	9.84 952	27	0.15 048	9.91 694	9	44				
17	9.76 164	18	9.84 979	27	0.15 021	9.91 685	9	43				
18	9.76 182	18	9.85 006	27	0.14 994	9.91 676	9	42				
19	9.76 200	18	9.85 033	26	0.14 967	9.91 667	9	41				
20	9.76 218		9.85 059		0.14 941	9.91 658		40				
21	9.76 236	18	9.85 086	27	0.14 914	9.91 649	8	39				
22	9.76 258	18	9.85 113	27	0.14 887	9.91 641	9	38				
23	9.76 271	18	9.85 140	26	0.14 860	9.91 632	9	37				
24	9.76 289	18	9.85 166	27	0.14 834	9.91 623	9	36				
25	9.76 307		9.85 193		0.14 807	9.91 614		35				
26	9.76 324	17	9.85 220	27	0.14 780	9.91 605	9	34				
27	9.76 342	18	9.85 247	26	0.14 753	9.91 596	9	33				
28	9.76 360	18	9.85 273	27	0.14 727	9.91 587	9	32				
29	9.76 378	17	9.85 300	27	0.14 700	9.91 578	9	31				
30	9.76 395		9.85 327		0.14 673	9.91 569		30				
31	9.76 413	18	9.85 354	27	0.14 646	9.91 560	9	29				
32	9.76 431	17	9.85 380	27	0.14 620	9.91 551	9	28				
33	9.76 448	18	9.85 407	27	0.14 593	9.91 542	9	27				
34	9.76 466	18	9.85 434	26	0.14 566	9.91 533	10	26				
35	9.76 484		9.85 460		0.14 540	9.91 523		25				
36	9.76 501	17	9.85 487	27	0.14 513	9.91 514	9	24				
37	9.76 519	18	9.85 514	26	0.14 486	9.91 505	9	23				
38	9.76 537	17	9.85 540	27	0.14 460	9.90 996	9	22				
39	9.76 554	18	9.85 567	27	0.14 433	9.90 987	9	21				
40	9.76 572		9.85 594		0.14 406	9.90 978		20				
41	9.76 590	17	9.85 620	27	0.14 380	9.90 969	9	19				
42	9.76 607	18	9.85 647	27	0.14 353	9.90 960	9	18				
43	9.76 625	17	9.85 674	26	0.14 326	9.90 951	9	17				
44	9.76 642	18	9.85 700	27	0.14 300	9.90 942	9	16				
45	9.76 660		9.85 727		0.14 273	9.90 933		15				
46	9.76 677	17	9.85 754	26	0.14 246	9.90 924	9	14				
47	9.76 695	17	9.85 780	27	0.14 220	9.90 915	9	13				
48	9.76 712	18	9.85 807	27	0.14 193	9.90 906	10	12				
49	9.76 730	17	9.85 834	26	0.14 166	9.90 896	9	11				
50	9.76 747		9.85 860		0.14 140	9.90 887		10				
51	9.76 765	18	9.85 887	27	0.14 113	9.90 878	9	9				
52	9.76 782	18	9.85 913	27	0.14 087	9.90 869	9	8				
53	9.76 800	17	9.85 940	27	0.14 060	9.90 860	9	7				
54	9.76 817	18	9.85 967	26	0.14 033	9.90 851	9	6				
55	9.76 835		9.85 993		0.14 007	9.90 842		5				
56	9.76 852	18	9.86 020	26	0.13 980	9.90 833	10	4				
57	9.76 870	17	9.86 046	27	0.13 954	9.90 823	9	3				
58	9.76 887	17	9.86 073	27	0.13 927	9.90 814	9	2				
59	9.76 904	18	9.86 100	26	0.13 900	9.90 805	9	1				
60	9.76 922		9.86 126		0.13 874	9.90 796		0				
	L. Cos.	d.	L. Cotg.	c.d.	L. Tang.	L. Stn.	d.		P. P.			

	L. Sin.	d.	L. Tang.	c.d.	L. Cotg.	L. Cos.	d.		P. P.
0	9.76 922	17	9.86 126	27	0.13 874	9.90 796	9	60	
1	9.76 939	18	9.86 158	26	0.13 847	9.90 787	10	59	
2	9.76 957	17	9.86 179	27	0.13 821	9.90 777	9	58	
3	9.76 974	17	9.86 206	26	0.13 794	9.90 768	9	57	
4	9.76 991	18	9.86 232	27	0.13 768	9.90 759	9	56	
5	9.77 009	17	9.86 259	26	0.13 741	9.90 750	9	55	
6	9.77 026	17	9.86 285	27	0.13 715	9.90 741	10	54	
7	9.77 043	18	9.86 312	26	0.13 688	9.90 731	9	53	
8	9.77 061	17	9.86 338	27	0.13 662	9.90 722	9	52	
9	9.77 078	17	9.86 365	27	0.13 635	9.90 713	9	51	
10	9.77 095	17	9.86 392	26	0.13 608	9.90 704	10	50	
11	9.77 112	18	9.86 418	27	0.13 582	9.90 694	9	49	
12	9.77 130	17	9.86 445	26	0.13 555	9.90 685	9	48	
13	9.77 147	17	9.86 471	27	0.13 529	9.90 676	9	47	
14	9.77 164	17	9.86 498	26	0.13 502	9.90 667	10	46	
15	9.77 181	18	9.86 524	27	0.13 476	9.90 657	9	45	
16	9.77 199	17	9.86 551	26	0.13 449	9.90 648	9	44	
17	9.77 216	17	9.86 577	26	0.13 423	9.90 639	9	43	
18	9.77 233	17	9.86 603	27	0.13 397	9.90 630	10	42	
19	9.77 250	18	9.86 630	26	0.13 370	9.90 620	9	41	
20	9.77 268	17	9.86 656	27	0.13 344	9.90 611	9	40	
21	9.77 285	17	9.86 683	26	0.13 317	9.90 602	10	39	
22	9.77 302	17	9.86 709	27	0.13 291	9.90 592	9	38	
23	9.77 319	17	9.86 736	26	0.13 264	9.90 583	9	37	
24	9.77 336	17	9.86 762	27	0.13 238	9.90 574	9	36	
25	9.77 353	17	9.86 789	26	0.13 211	9.90 565	10	35	
26	9.77 370	17	9.86 815	27	0.13 185	9.90 555	9	34	
27	9.77 387	17	9.86 842	26	0.13 158	9.90 546	9	33	
28	9.77 405	18	9.86 868	26	0.13 132	9.90 537	10	32	
29	9.77 422	17	9.86 894	27	0.13 106	9.90 527	9	31	
30	9.77 439	17	9.86 921	26	0.13 079	9.90 518	9	30	
31	9.77 456	17	9.86 947	27	0.13 053	9.90 509	10	29	
32	9.77 473	17	9.86 974	26	0.13 026	9.90 499	9	28	
33	9.77 490	17	9.87 000	27	0.13 000	9.90 490	10	27	
34	9.77 507	17	9.87 027	26	0.12 973	9.90 480	9	26	
35	9.77 524	17	9.87 053	26	0.12 947	9.90 471	9	25	
36	9.77 541	17	9.87 079	27	0.12 921	9.90 462	10	24	
37	9.77 558	17	9.87 106	26	0.12 894	9.90 452	9	23	
38	9.77 575	17	9.87 132	26	0.12 868	9.90 443	9	22	
39	9.77 592	17	9.87 158	27	0.12 842	9.90 434	10	21	
40	9.77 609	17	9.87 185	26	0.12 815	9.90 424	9	20	
41	9.77 626	17	9.87 211	27	0.12 789	9.90 415	10	19	
42	9.77 643	17	9.87 238	26	0.12 762	9.90 405	9	18	
43	9.77 660	17	9.87 264	26	0.12 736	9.90 396	10	17	
44	9.77 677	17	9.87 290	27	0.12 710	9.90 386	9	16	
45	9.77 694	17	9.87 317	26	0.12 683	9.90 377	9	15	
46	9.77 711	17	9.87 343	26	0.12 657	9.90 368	10	14	
47	9.77 728	16	9.87 369	27	0.12 631	9.90 358	9	13	
48	9.77 744	17	9.87 396	26	0.12 604	9.90 349	10	12	
49	9.77 761	17	9.87 422	26	0.12 578	9.90 339	9	11	
50	9.77 778	17	9.87 448	27	0.12 552	9.90 330	10	10	
51	9.77 795	17	9.87 475	26	0.12 525	9.90 320	9	9	
52	9.77 812	17	9.87 501	26	0.12 499	9.90 311	10	8	
53	9.77 829	17	9.87 527	27	0.12 473	9.90 301	9	7	
54	9.77 846	16	9.87 554	26	0.12 446	9.90 292	10	6	
55	9.77 862	17	9.87 580	26	0.12 420	9.90 282	9	5	
56	9.77 879	17	9.87 606	27	0.12 394	9.90 273	10	4	
57	9.77 896	17	9.87 633	26	0.12 367	9.90 263	9	3	
58	9.77 913	17	9.87 659	26	0.12 341	9.90 254	10	2	
59	9.77 930	16	9.87 685	26	0.12 315	9.90 244	9	1	
60	9.77 946		9.97 711		0.12 289	9.90 235		0	
	L. Cos.	d.	L. Cotg.	c.d.	L. Tang.	L. Sin.	d.		P. P.

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	L. Sin.	d.	L. Tang.	d.	L. Cotg.	L. Cos.	d.		P. P.
0	9.77 946		9.87 711		0.12 289	9.90 235		60	
1	9.77 968	17	9.87 738	27	0.12 262	9.90 225	10	59	
2	9.77 990	17	9.87 764	26	0.12 236	9.90 216	9	58	
3	9.77 997	16	9.87 790	27	0.12 210	9.90 206	9	57	
4	9.78 018	17	9.87 817	26	0.12 188	9.90 197	10	56	
5	9.78 080	17	9.87 843	26	0.12 157	9.90 187	9	55	
6	9.78 047	16	9.87 869	26	0.12 131	9.90 178	10	54	
7	9.78 063	17	9.87 895	27	0.12 106	9.90 168	9	53	
8	9.78 080	17	9.87 922	26	0.12 078	9.90 159	10	52	
9	9.78 097	16	9.87 948	26	0.12 052	9.90 149	10	51	
10	9.78 118	17	9.87 974	26	0.12 026	9.90 139	9	50	
11	9.78 130	17	9.88 000	27	0.12 000	9.90 130	10	49	
12	9.78 147	16	9.88 027	26	0.11 978	9.90 120	9	48	
13	9.78 163	17	9.88 058	26	0.11 947	9.90 111	10	47	
14	9.78 180	17	9.88 079	26	0.11 921	9.90 101	10	46	
15	9.78 197	16	9.88 105	27	0.11 895	9.90 091	9	45	
16	9.78 218	17	9.88 131	26	0.11 869	9.90 082	10	44	
17	9.78 230	16	9.88 158	26	0.11 842	9.90 072	9	43	
18	9.78 246	17	9.88 184	26	0.11 816	9.90 063	10	42	
19	9.78 263	17	9.88 210	26	0.11 790	9.90 053	10	41	
20	9.78 280	16	9.88 236	27	0.11 764	9.90 043	9	40	
21	9.78 296	17	9.88 262	26	0.11 738	9.90 034	10	39	
22	9.78 313	16	9.88 289	26	0.11 711	9.90 024	9	38	
23	9.78 329	17	9.88 315	26	0.11 685	9.90 014	10	37	
24	9.78 346	16	9.88 341	26	0.11 659	9.90 005	10	36	
25	9.78 362	17	9.88 367	27	0.11 633	9.89 995	9	35	
26	9.78 379	16	9.88 393	26	0.11 607	9.89 985	10	34	
27	9.78 395	17	9.88 420	26	0.11 580	9.89 976	9	33	
28	9.78 412	16	9.88 446	26	0.11 554	9.89 966	10	32	
29	9.78 428	17	9.88 472	26	0.11 528	9.89 956	9	31	
30	9.78 445	16	9.88 498	27	0.11 502	9.89 947	10	30	
31	9.78 461	17	9.88 524	26	0.11 476	9.89 937	9	29	
32	9.78 478	16	9.88 550	26	0.11 450	9.89 927	10	28	
33	9.78 494	17	9.88 577	27	0.11 423	9.89 918	9	27	
34	9.78 510	16	9.88 603	26	0.11 397	9.89 908	10	26	
35	9.78 527	17	9.88 629	26	0.11 371	9.89 898	9	25	
36	9.78 543	16	9.88 655	26	0.11 345	9.89 888	10	24	
37	9.78 560	17	9.88 681	26	0.11 319	9.89 879	9	23	
38	9.78 576	16	9.88 707	26	0.11 293	9.89 869	10	22	
39	9.78 592	17	9.88 733	26	0.11 267	9.89 859	9	21	
40	9.78 609	16	9.88 759	27	0.11 241	9.89 849	10	20	
41	9.78 625	17	9.88 786	26	0.11 214	9.89 840	9	19	
42	9.78 642	16	9.88 812	26	0.11 188	9.89 830	10	18	
43	9.78 658	17	9.88 838	26	0.11 162	9.89 820	9	17	
44	9.78 674	16	9.88 864	26	0.11 136	9.89 810	10	16	
45	9.78 691	17	9.88 890	26	0.11 110	9.89 801	9	15	
46	9.78 707	16	9.88 916	26	0.11 084	9.89 791	10	14	
47	9.78 723	17	9.88 942	26	0.11 058	9.89 781	9	13	
48	9.78 739	16	9.88 968	26	0.11 032	9.89 771	10	12	
49	9.78 756	17	9.88 994	26	0.11 006	9.89 761	9	11	
50	9.78 772	16	9.89 020	27	0.10 980	9.89 752	10	10	
51	9.78 788	17	9.89 046	26	0.10 954	9.89 742	9	9	
52	9.78 805	16	9.89 078	26	0.10 927	9.89 732	10	8	
53	9.78 821	17	9.89 099	26	0.10 901	9.89 722	9	7	
54	9.78 837	16	9.89 125	26	0.10 875	9.89 712	10	6	
55	9.78 853	17	9.89 151	26	0.10 849	9.89 702	9	5	
56	9.78 869	16	9.89 177	26	0.10 823	9.89 693	10	4	
57	9.78 886	17	9.89 208	26	0.10 797	9.89 683	9	3	
58	9.78 902	16	9.89 229	26	0.10 771	9.89 673	10	2	
59	9.78 918	17	9.89 255	26	0.10 745	9.89 663	9	1	
60	9.78 934		9.89 281		0.10 719	9.89 653		0	
	L. Cos.	d.	L. Cotg.	d.	L. Tang.	L. Sin.	d.		P. P.

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	L. Sin.	d.	L. Tang.	c.d.	L. Cotg.	L. Cos.	d.		P. P.
0	9.78 934		9.89 281		0.10 719	9.89 658		60	
1	9.78 950	16	9.89 307	26	0.10 698	9.89 648	10	59	
2	9.78 967	17	9.89 338	26	0.10 667	9.89 638	10	58	
3	9.78 988	16	9.89 359	26	0.10 641	9.89 624	9	57	
4	9.78 999	16	9.89 385	26	0.10 615	9.89 614	10	56	
5	9.79 015		9.89 411		0.10 589	9.89 604		55	
6	9.79 031	16	9.89 437	26	0.10 568	9.89 594	10	54	
7	9.79 047	16	9.89 468	26	0.10 537	9.89 584	10	53	
8	9.79 068	16	9.89 489	26	0.10 511	9.89 574	10	52	
9	9.79 079	16	9.89 515	26	0.10 485	9.89 564	10	51	
10	9.79 095		9.89 541		0.10 459	9.89 554		50	
11	9.79 111	16	9.89 567	26	0.10 428	9.89 544	10	49	
12	9.79 128	17	9.89 593	26	0.10 407	9.89 534	10	48	
13	9.79 144	16	9.89 619	26	0.10 381	9.89 524	10	47	
14	9.79 160	16	9.89 645	26	0.10 355	9.89 514	10	46	
15	9.79 176		9.89 671		0.10 329	9.89 504		45	
16	9.79 192	16	9.89 697	26	0.10 308	9.89 495	9	44	
17	9.79 208	16	9.89 728	26	0.10 277	9.89 485	10	43	
18	9.79 224	16	9.89 749	26	0.10 251	9.89 475	10	42	
19	9.79 240	16	9.89 775	26	0.10 225	9.89 465	10	41	
20	9.79 256		9.89 801		0.10 199	9.89 455		40	
21	9.79 272	16	9.89 827	26	0.10 178	9.89 445	10	39	
22	9.79 288	16	9.89 858	26	0.10 147	9.89 435	10	38	
23	9.79 304	15	9.89 879	26	0.10 121	9.89 425	10	37	
24	9.79 319	16	9.89 905	26	0.10 095	9.89 415	10	36	
25	9.79 335		9.89 931		0.10 069	9.89 405		35	
26	9.79 351	16	9.89 957	26	0.10 048	9.89 395	10	34	
27	9.79 367	16	9.89 983	26	0.10 017	9.89 385	10	33	
28	9.79 383	16	9.90 009	26	0.09 991	9.89 375	11	32	
29	9.79 399	16	9.90 035	26	0.09 965	9.89 364	10	31	
30	9.79 415		9.90 061		0.09 939	9.89 354		30	
31	9.79 431	16	9.90 086	26	0.09 914	9.89 344	10	29	
32	9.79 447	16	9.90 112	26	0.09 888	9.89 334	10	28	
33	9.79 463	15	9.90 138	26	0.09 862	9.89 324	10	27	
34	9.79 478	16	9.90 164	26	0.09 836	9.89 314	10	26	
35	9.79 494		9.90 190		0.09 810	9.89 304		25	
36	9.79 510	16	9.90 216	26	0.09 784	9.89 294	10	24	
37	9.79 526	16	9.90 242	26	0.09 758	9.89 284	10	23	
38	9.79 542	16	9.90 268	26	0.09 732	9.89 274	10	22	
39	9.79 558	15	9.90 294	26	0.09 706	9.89 264	10	21	
40	9.79 573		9.90 320		0.09 680	9.89 254		20	
41	9.79 589	16	9.90 346	26	0.09 654	9.89 244	10	19	
42	9.79 605	16	9.90 371	26	0.09 629	9.89 238	10	18	
43	9.79 621	15	9.90 397	26	0.09 608	9.89 228	10	17	
44	9.79 636	16	9.90 423	26	0.09 577	9.89 218	10	16	
45	9.79 652		9.90 449		0.09 551	9.89 208		15	
46	9.79 668	16	9.90 475	26	0.09 525	9.89 198	10	14	
47	9.79 684	15	9.90 501	26	0.09 499	9.89 188	10	13	
48	9.79 699	16	9.90 527	26	0.09 473	9.89 178	11	12	
49	9.79 715	16	9.90 553	25	0.09 447	9.89 168	10	11	
50	9.79 731		9.90 578		0.09 422	9.89 158		10	
51	9.79 746	15	9.90 604	26	0.09 396	9.89 148	10	9	
52	9.79 762	16	9.90 630	26	0.09 370	9.89 138	10	8	
53	9.79 778	15	9.90 656	26	0.09 344	9.89 128	10	7	
54	9.79 793	16	9.90 682	26	0.09 318	9.89 118	11	6	
55	9.79 809		9.90 708		0.09 292	9.89 108		5	
56	9.79 825	15	9.90 734	26	0.09 266	9.89 098	10	4	
57	9.79 840	16	9.90 759	26	0.09 241	9.89 088	10	3	
58	9.79 856	16	9.90 785	26	0.09 215	9.89 078	11	2	
59	9.79 872	15	9.90 811	26	0.09 189	9.89 068	10	1	
60	9.79 887		9.90 837		0.09 168	9.89 058		0	
	L. Cos.	d.	L. Cotg.	c.d.	L. Tang.	L. Stn.	d.		P. P.

	L. Sin.	d.	L. Tang.	c.d.	L. Cotg.	L. Cos.	d.		P. P.
0	9.79 887	16	9.90 887	26	0.09 163	9.89 050	10	60	
1	9.79 908	15	9.90 868	26	0.09 187	9.89 040	10	59	
2	9.79 918	15	9.90 889	26	0.09 111	9.89 030	10	58	
3	9.79 934	16	9.90 914	25	0.09 086	9.89 020	10	57	
4	9.79 950	15	9.90 940	26	0.09 060	9.89 009	11	56	
							10		26 25
5	9.79 965	16	9.90 966	26	0.09 034	9.88 999	10	55	1 0.4 0.4
6	9.79 981	16	9.90 992	26	0.09 008	9.88 989	10	54	2 0.9 0.8
7	9.79 996	15	9.91 018	26	0.08 982	9.88 978	11	53	3 1.3 1.2
8	9.80 012	15	9.91 043	25	0.08 957	9.88 968	10	52	4 1.7 1.7
9	9.80 027	16	9.91 069	26	0.08 931	9.88 958	10	51	
							10		5 2.2 2.1
10	9.80 043	15	9.91 095	26	0.08 905	9.88 948	11	50	6 2.6 2.5
11	9.80 058	16	9.91 121	26	0.08 879	9.88 937	10	49	7 3.0 2.9
12	9.80 074	16	9.91 147	26	0.08 853	9.88 927	10	48	8 3.5 3.4
13	9.80 089	15	9.91 172	25	0.08 828	9.88 917	10	47	9 3.9 3.8
14	9.80 105	15	9.91 198	26	0.08 802	9.88 906	11	46	
							10		10 4.3 4.2
15	9.80 120	16	9.91 224	26	0.08 776	9.88 896	10	45	20 4.7 4.6
16	9.80 136	15	9.91 250	26	0.08 750	9.88 886	10	44	30 5.1 5.0
17	9.80 151	15	9.91 276	26	0.08 724	9.88 875	11	43	40 5.5 5.4
18	9.80 166	15	9.91 301	25	0.08 699	9.88 865	10	42	50 5.9 5.8
19	9.80 182	15	9.91 327	26	0.08 673	9.88 855	10	41	
							11		21.7 20.8
20	9.80 197	16	9.91 353	26	0.08 647	9.88 844	10	40	
21	9.80 213	15	9.91 379	26	0.08 621	9.88 834	10	39	
22	9.80 228	16	9.91 404	25	0.08 596	9.88 824	10	38	
23	9.80 244	16	9.91 430	26	0.08 570	9.88 813	11	37	
24	9.80 259	15	9.91 456	26	0.08 544	9.88 803	10	36	16 15
									1 0.3 0.2
25	9.80 274	16	9.91 482	25	0.08 518	9.88 793	11	35	2 0.5 0.5
26	9.80 290	15	9.91 507	26	0.08 493	9.88 782	10	34	3 0.8 0.8
27	9.80 305	15	9.91 533	26	0.08 467	9.88 772	10	33	4 1.1 1.0
28	9.80 320	16	9.91 559	26	0.08 441	9.88 761	11	32	
29	9.80 336	15	9.91 585	25	0.08 415	9.88 751	10	31	5 1.3 1.2
							10		6 1.6 1.5
30	9.80 351	15	9.91 610	26	0.08 390	9.88 741	11	30	7 1.9 1.8
31	9.80 366	16	9.91 636	26	0.08 364	9.88 730	10	29	8 2.1 2.0
32	9.80 382	15	9.91 662	26	0.08 338	9.88 720	10	28	9 2.4 2.2
33	9.80 397	15	9.91 688	26	0.08 312	9.88 709	11	27	
34	9.80 412	16	9.91 713	25	0.08 287	9.88 699	10	26	10 2.7 2.6
							11		20 3.0 2.9
35	9.80 428	15	9.91 739	26	0.08 261	9.88 688	10	25	30 3.3 3.2
36	9.80 443	15	9.91 765	26	0.08 235	9.88 678	10	24	40 3.6 3.5
37	9.80 458	15	9.91 791	26	0.08 209	9.88 668	10	23	50 3.9 3.8
38	9.80 473	15	9.91 816	26	0.08 184	9.88 657	11	22	
39	9.80 489	16	9.91 842	26	0.08 158	9.88 647	11	21	18.8 12.5
40	9.80 504	15	9.91 868	25	0.08 132	9.88 636	10	20	
41	9.80 519	15	9.91 893	26	0.08 107	9.88 626	11	19	
42	9.80 534	15	9.91 919	26	0.08 081	9.88 615	11	18	
43	9.80 550	16	9.91 945	26	0.08 055	9.88 605	11	17	11 10
44	9.80 565	15	9.91 971	25	0.08 029	9.88 594	10	16	1 0.2 0.2
									2 0.4 0.3
45	9.80 580	15	9.91 996	26	0.08 004	9.88 584	11	15	3 0.6 0.5
46	9.80 595	15	9.92 022	26	0.07 978	9.88 573	10	14	4 0.7 0.7
47	9.80 610	15	9.92 048	26	0.07 952	9.88 563	11	13	
48	9.80 625	15	9.92 073	26	0.07 927	9.88 552	10	12	5 0.9 0.8
49	9.80 641	16	9.92 099	26	0.07 901	9.88 542	11	11	6 1.1 1.0
									7 1.3 1.2
50	9.80 656	15	9.92 125	25	0.07 875	9.88 531	10	10	8 1.5 1.4
51	9.80 671	15	9.92 150	26	0.07 850	9.88 521	11	9	9 1.6 1.5
52	9.80 686	15	9.92 176	26	0.07 824	9.88 510	11	8	
53	9.80 701	15	9.92 202	25	0.07 798	9.88 499	10	7	10 1.8 1.7
54	9.80 716	15	9.92 227	26	0.07 773	9.88 489	11	6	20 2.1 2.0
									30 2.4 2.3
55	9.80 731	15	9.92 253	26	0.07 747	9.88 478	10	5	40 2.7 2.6
56	9.80 746	16	9.92 279	25	0.07 721	9.88 468	11	4	50 3.0 2.9
57	9.80 762	15	9.92 304	26	0.07 696	9.88 457	10	3	
58	9.80 777	15	9.92 330	26	0.07 670	9.88 447	11	2	
59	9.80 792	15	9.92 356	25	0.07 644	9.88 436	11	1	
60	9.80 807		9.92 381		0.07 619	9.88 425		0	
	L. Cos.	d.	L. Cotg.	c.d.	L. Tang.	L. Sin.	d.		P. P.

	L. Sin.	d.	L. Tang.	c.d.	L. Cotg.	L. Cos.	d.		P. P.
0	9.80 807	15	9.92 881	26	0.07 619	9.88 425	10	60	
1	9.80 822	15	9.92 407	26	0.07 593	9.88 415	11	59	
2	9.80 837	15	9.92 438	25	0.07 567	9.88 404	10	58	
3	9.80 852	15	9.92 458	25	0.07 542	9.88 394	11	57	
4	9.80 867	15	9.92 454	25	0.07 516	9.88 383	11	56	
5	9.80 882	15	9.92 510	25	0.07 490	9.88 372	10	55	
6	9.80 897	15	9.92 585	26	0.07 465	9.88 362	11	54	
7	9.80 912	15	9.92 561	26	0.07 439	9.88 351	11	53	
8	9.80 927	15	9.92 587	25	0.07 413	9.88 340	10	52	
9	9.80 942	15	9.92 612	25	0.07 388	9.88 330	11	51	
10	9.80 957	15	9.92 688	25	0.07 362	9.88 319	11	50	
11	9.80 972	15	9.92 668	26	0.07 337	9.88 308	10	49	
12	9.80 987	15	9.92 689	26	0.07 311	9.88 298	11	48	
13	9.81 002	15	9.92 715	25	0.07 285	9.88 287	11	47	
14	9.81 017	15	9.92 740	26	0.07 260	9.88 276	10	46	
15	9.81 032	15	9.92 766	26	0.07 234	9.88 266	11	45	
16	9.81 047	14	9.92 792	25	0.07 208	9.88 255	11	44	
17	9.81 061	15	9.92 817	26	0.07 183	9.88 244	10	43	
18	9.81 076	15	9.92 843	25	0.07 157	9.88 234	11	42	
19	9.81 091	15	9.92 868	26	0.07 132	9.88 223	11	41	
20	9.81 106	15	9.92 894	26	0.07 106	9.88 212	11	40	
21	9.81 121	15	9.92 920	25	0.07 080	9.88 201	10	39	
22	9.81 136	15	9.92 945	26	0.07 055	9.88 191	11	38	
23	9.81 151	15	9.92 971	25	0.07 029	9.88 180	11	37	
24	9.81 166	14	9.92 996	26	0.07 004	9.88 169	11	36	
25	9.81 180	15	9.93 022	26	0.06 978	9.88 158	10	35	
26	9.81 195	15	9.93 048	25	0.06 952	9.88 148	11	34	
27	9.81 210	15	9.93 073	26	0.06 927	9.88 137	11	33	
28	9.81 225	15	9.93 099	25	0.06 901	9.88 126	11	32	
29	9.81 240	14	9.93 124	26	0.06 876	9.88 115	10	31	
30	9.81 254	15	9.93 150	25	0.06 850	9.88 105	11	30	
31	9.81 269	15	9.93 175	26	0.06 825	9.88 094	11	29	
32	9.81 284	15	9.93 201	26	0.06 799	9.88 083	11	28	
33	9.81 299	15	9.93 227	25	0.06 773	9.88 072	11	27	
34	9.81 314	14	9.93 252	26	0.06 748	9.88 061	10	26	
35	9.81 328	15	9.93 278	25	0.06 722	9.88 051	11	25	
36	9.81 343	15	9.93 303	26	0.06 697	9.88 040	11	24	
37	9.81 358	15	9.93 329	25	0.06 671	9.88 029	11	23	
38	9.81 372	14	9.93 354	26	0.06 646	9.88 018	11	22	
39	9.81 387	15	9.93 380	26	0.06 620	9.88 007	11	21	
40	9.81 402	15	9.93 406	25	0.06 594	9.87 996	11	20	
41	9.81 417	14	9.93 431	26	0.06 569	9.87 985	10	19	
42	9.81 431	15	9.93 457	25	0.06 543	9.87 975	11	18	
43	9.81 446	15	9.93 482	26	0.06 518	9.87 964	11	17	
44	9.81 461	14	9.93 508	25	0.06 492	9.87 953	11	16	
45	9.81 475	15	9.93 533	26	0.06 467	9.87 942	11	15	
46	9.81 490	15	9.93 559	25	0.06 441	9.87 931	11	14	
47	9.81 505	14	9.93 584	26	0.06 416	9.87 920	11	13	
48	9.81 519	15	9.93 610	25	0.06 390	9.87 909	11	12	
49	9.81 534	15	9.93 636	26	0.06 364	9.87 898	11	11	
50	9.81 549	14	9.93 661	25	0.06 339	9.87 887	10	10	
51	9.81 563	15	9.93 687	26	0.06 313	9.87 877	11	9	
52	9.81 578	14	9.93 712	25	0.06 288	9.87 866	11	8	
53	9.81 592	15	9.93 738	26	0.06 262	9.87 855	11	7	
54	9.81 607	15	9.93 763	25	0.06 237	9.87 844	11	6	
55	9.81 622	14	9.93 789	26	0.06 211	9.87 833	11	5	
56	9.81 636	15	9.93 814	25	0.06 186	9.87 822	11	4	
57	9.81 651	14	9.93 840	26	0.06 160	9.87 811	11	3	
58	9.81 665	15	9.93 865	25	0.06 135	9.87 800	11	2	
59	9.81 680	14	9.93 891	26	0.06 109	9.87 789	11	1	
60	9.81 694		9.93 916		0.06 084	9.87 778		0	
	L. Cos.	d.	L. Cotg.	c.d.	L. Tang.	L. Sin.	d.		P. P.



	L. Sin.	d.	L. Tang.	c.d.	L. Cotg.	L. Cos.	d.		P. P.
0	9.81 694	15	9.98 916	26	0.06 084	9.87 778	11	60	
1	9.81 709	14	9.98 942	25	0.06 058	9.87 767	11	59	
2	9.81 723	15	9.98 967	26	0.06 088	9.87 756	11	58	
3	9.81 738	14	9.98 998	25	0.06 007	9.87 745	11	57	
4	9.81 752	15	9.94 018	26	0.05 982	9.87 734	11	56	20 25
5	9.81 767	14	9.94 044	25	0.05 956	9.87 728	11	55	1 0.4 0.4
6	9.81 781	15	9.94 069	26	0.05 931	9.87 712	11	54	2 0.9 0.8
7	9.81 796	14	9.94 095	25	0.05 905	9.87 701	11	53	3 1.8 1.2
8	9.81 810	15	9.94 120	26	0.05 880	9.87 690	11	52	4 1.7 1.7
9	9.81 825	14	9.94 146	25	0.05 854	9.87 679	11	51	
10	9.81 839	15	9.94 171	26	0.05 829	9.87 668	11	50	5 2.2 2.1
11	9.81 854	14	9.94 197	25	0.05 808	9.87 657	11	49	6 2.6 2.5
12	9.81 868	15	9.94 222	26	0.05 778	9.87 646	11	48	7 3.0 2.9
13	9.81 883	14	9.94 248	25	0.05 752	9.87 635	11	47	8 3.5 3.3
14	9.81 897	15	9.94 273	26	0.05 727	9.87 624	11	46	9 3.9 3.8
15	9.81 911	14	9.94 299	25	0.05 701	9.87 618	12	45	10 4.8 4.2
16	9.81 926	15	9.94 324	26	0.05 676	9.87 601	11	44	20 8.7 8.3
17	9.81 940	14	9.94 350	25	0.05 650	9.87 590	11	43	30 18.0 12.6
18	9.81 955	15	9.94 375	26	0.05 625	9.87 579	11	42	40 17.8 16.7
19	9.81 969	14	9.94 401	25	0.05 599	9.87 568	11	41	50 21.7 20.8
20	9.81 983	15	9.94 426	26	0.05 574	9.87 557	11	40	
21	9.81 998	14	9.94 452	25	0.05 548	9.87 546	11	39	
22	9.82 012	15	9.94 477	26	0.05 523	9.87 535	11	38	
23	9.82 026	14	9.94 503	25	0.05 497	9.87 524	11	37	15 14
24	9.82 041	15	9.94 528	26	0.05 472	9.87 518	12	36	1 0.2 0.2
25	9.82 055	14	9.94 554	25	0.05 446	9.87 501	11	35	2 0.5 0.5
26	9.82 069	15	9.94 579	26	0.05 421	9.87 490	11	34	3 0.8 0.7
27	9.82 084	14	9.94 604	25	0.05 396	9.87 479	11	33	4 1.0 0.9
28	9.82 098	15	9.94 630	26	0.05 370	9.87 468	11	32	
29	9.82 112	14	9.94 655	25	0.05 345	9.87 457	11	31	5 1.2 1.2
30	9.82 126	15	9.94 681	26	0.05 319	9.87 446	12	30	6 1.5 1.4
31	9.82 141	14	9.94 706	25	0.05 294	9.87 434	11	29	7 1.8 1.6
32	9.82 155	15	9.94 732	26	0.05 268	9.87 423	11	28	8 2.0 1.9
33	9.82 169	14	9.94 757	25	0.05 243	9.87 412	11	27	9 2.2 2.1
34	9.82 184	15	9.94 783	26	0.05 217	9.87 401	11	26	10 2.5 2.3
35	9.82 198	14	9.94 808	25	0.05 192	9.87 390	12	25	20 5.0 4.7
36	9.82 212	15	9.94 834	26	0.05 166	9.87 378	11	24	30 7.5 7.0
37	9.82 226	14	9.94 859	25	0.05 141	9.87 367	11	23	40 10.0 9.8
38	9.82 240	15	9.94 884	26	0.05 116	9.87 356	11	22	50 12.5 11.7
39	9.82 255	14	9.94 910	25	0.05 090	9.87 345	11	21	
40	9.82 269	15	9.94 935	26	0.05 065	9.87 334	12	20	
41	9.82 283	14	9.94 961	25	0.05 039	9.87 322	11	19	
42	9.82 297	15	9.94 986	26	0.05 014	9.87 311	11	18	12 11
43	9.82 311	14	9.95 012	25	0.04 988	9.87 300	12	17	1 0.2 0.2
44	9.82 326	15	9.95 037	26	0.04 968	9.87 288	11	16	2 0.4 0.4
45	9.82 340	14	9.95 062	25	0.04 938	9.87 277	11	15	3 0.6 0.6
46	9.82 354	15	9.95 088	26	0.04 912	9.87 266	11	14	4 0.8 0.7
47	9.82 368	14	9.95 113	25	0.04 887	9.87 255	12	13	
48	9.82 382	15	9.95 139	26	0.04 861	9.87 243	11	12	5 1.0 0.9
49	9.82 396	14	9.95 164	25	0.04 836	9.87 232	11	11	6 1.2 1.1
50	9.82 410	15	9.95 190	26	0.04 810	9.87 221	12	10	7 1.4 1.3
51	9.82 424	14	9.95 215	25	0.04 785	9.87 209	11	9	8 1.6 1.5
52	9.82 439	15	9.95 240	26	0.04 760	9.87 198	11	8	9 1.8 1.6
53	9.82 453	14	9.95 266	25	0.04 734	9.87 187	12	7	10 2.0 1.8
54	9.82 467	15	9.95 291	26	0.04 709	9.87 175	11	6	20 4.0 3.7
55	9.82 481	14	9.95 317	25	0.04 683	9.87 164	11	5	30 6.0 5.5
56	9.82 495	15	9.95 342	26	0.04 658	9.87 153	12	4	40 8.0 7.3
57	9.82 509	14	9.95 368	25	0.04 632	9.87 141	11	3	50 10.0 9.2
58	9.82 523	15	9.95 393	26	0.04 607	9.87 130	11	2	
59	9.82 537	14	9.95 418	25	0.04 582	9.87 119	12	1	
60	9.82 551	15	9.95 444	26	0.04 556	9.87 107	11	0	
	L. Cos.	d.	L. Cotg.	c.d.	L. Tang.	L. Sin.	d.		P. P.

	L. Sin.	d.	L. Tang.	c.d.	L. Cotg.	L. Cos.	d.		P. P.
0	9.82 551	14	9.95 444	25	0.04 556	9.87 107	11	60	
1	9.82 565	14	9.95 469	26	0.04 581	9.87 096	11	59	
2	9.82 579	14	9.95 495	25	0.04 505	9.87 085	12	58	
3	9.82 598	14	9.95 520	25	0.04 480	9.87 073	12	57	
4	9.82 607	14	9.95 545	26	0.04 455	9.87 062	12	56	
5	9.82 621	14	9.95 571	25	0.04 429	9.87 050	11	55	
6	9.82 635	14	9.95 596	26	0.04 404	9.87 039	11	54	
7	9.82 649	14	9.95 622	25	0.04 378	9.87 028	12	53	
8	9.82 668	14	9.95 647	25	0.04 353	9.87 016	12	52	
9	9.82 677	14	9.95 672	26	0.04 328	9.87 005	12	51	
10	9.82 691	14	9.95 698	25	0.04 302	9.86 998	11	50	
11	9.82 705	14	9.95 728	25	0.04 277	9.86 982	12	49	
12	9.82 719	14	9.95 748	26	0.04 252	9.86 970	11	48	
13	9.82 738	14	9.95 774	25	0.04 226	9.86 959	12	47	
14	9.82 747	14	9.95 799	26	0.04 201	9.86 947	11	46	
15	9.82 761	14	9.95 825	25	0.04 175	9.86 936	12	45	
16	9.82 775	18	9.95 850	25	0.04 150	9.86 924	11	44	
17	9.82 788	14	9.95 875	26	0.04 125	9.86 913	11	43	
18	9.82 802	14	9.95 901	25	0.04 099	9.86 902	12	42	
19	9.82 816	14	9.95 926	26	0.04 074	9.86 890	11	41	
20	9.82 830	14	9.95 952	25	0.04 048	9.86 879	12	40	
21	9.82 844	14	9.95 977	25	0.04 023	9.86 867	12	39	
22	9.82 858	14	9.96 002	26	0.03 998	9.86 855	11	38	
23	9.82 872	18	9.96 028	25	0.03 972	9.86 844	12	37	
24	9.82 885	14	9.96 058	25	0.03 947	9.86 832	11	36	
25	9.82 899	14	9.96 078	26	0.03 922	9.86 821	12	35	
26	9.82 913	14	9.96 104	25	0.03 896	9.86 809	11	34	
27	9.82 927	14	9.96 129	26	0.03 871	9.86 798	12	33	
28	9.82 941	14	9.96 155	25	0.03 845	9.86 786	11	32	
29	9.82 955	18	9.96 180	25	0.03 820	9.86 775	12	31	
30	9.82 968	14	9.96 205	26	0.03 795	9.86 763	11	30	
31	9.82 982	14	9.96 231	25	0.03 769	9.86 752	12	29	
32	9.82 996	14	9.96 256	25	0.03 744	9.86 740	12	28	
33	9.83 010	18	9.96 281	26	0.03 719	9.86 728	11	27	
34	9.83 023	14	9.96 307	25	0.03 693	9.86 717	12	26	
35	9.83 037	14	9.96 332	25	0.03 668	9.86 705	11	25	
36	9.83 051	14	9.96 357	26	0.03 643	9.86 694	12	24	
37	9.83 065	18	9.96 388	25	0.03 617	9.86 682	12	23	
38	9.83 079	14	9.96 403	25	0.03 592	9.86 670	12	22	
39	9.83 092	14	9.96 438	26	0.03 567	9.86 659	11	21	
40	9.83 106	14	9.96 459	25	0.03 541	9.86 647	12	20	
41	9.83 120	18	9.96 484	26	0.03 516	9.86 635	11	19	
42	9.83 138	14	9.96 510	25	0.03 490	9.86 624	12	18	
43	9.83 147	14	9.96 535	25	0.03 465	9.86 612	12	17	
44	9.83 161	18	9.96 560	26	0.03 440	9.86 600	11	16	
45	9.83 174	14	9.96 586	25	0.03 414	9.86 589	12	15	
46	9.83 188	14	9.96 611	25	0.03 389	9.86 577	12	14	
47	9.83 202	18	9.96 636	26	0.03 364	9.86 565	11	13	
48	9.83 215	14	9.96 662	25	0.03 338	9.86 554	12	12	
49	9.83 229	18	9.96 687	25	0.03 313	9.86 542	12	11	
50	9.83 242	14	9.96 712	26	0.03 288	9.86 530	12	10	
51	9.83 256	14	9.96 738	25	0.03 262	9.86 518	11	9	
52	9.83 270	18	9.96 763	25	0.03 237	9.86 507	12	8	
53	9.83 283	14	9.96 788	26	0.03 212	9.86 495	12	7	
54	9.83 297	18	9.96 814	25	0.03 186	9.86 483	11	6	
55	9.83 310	14	9.96 839	25	0.03 161	9.86 472	12	5	
56	9.83 324	14	9.96 864	26	0.03 136	9.86 460	12	4	
57	9.83 338	18	9.96 890	25	0.03 110	9.86 448	12	3	
58	9.83 351	14	9.96 915	25	0.03 085	9.86 436	11	2	
59	9.83 365	18	9.96 940	26	0.03 060	9.86 425	12	1	
60	9.83 378		9.96 966		0.03 034	9.86 413		0	
	L. Cos.	d.	L. Cotg.	c.d.	L. Tang.	L. Sin.	d.		P. P.

	L. Sin.	d.	L. Tang.	c.d.	L. Cotg.	L. Cos.	d.		P. P.
0	9.88 873	14	9.96 966	25	0.03 084	9.86 418	12	60	
1	9.88 892	18	9.96 991	25	0.03 009	9.86 401	12	59	
2	9.88 405	14	9.97 016	26	0.02 984	9.86 389	12	58	
3	9.88 419	18	9.97 042	25	0.02 958	9.86 377	12	57	
4	9.88 432	14	9.97 067	25	0.02 933	9.86 366	12	56	
5	9.88 446	14	9.97 092	26	0.02 908	9.86 354	12	55	
6	9.88 459	18	9.97 118	25	0.02 882	9.86 342	12	54	
7	9.88 473	18	9.97 143	25	0.02 857	9.86 330	12	53	
8	9.88 486	18	9.97 169	25	0.02 832	9.86 318	12	52	
9	9.88 500	14	9.97 198	26	0.02 807	9.86 306	11	51	
10	9.88 518	14	9.97 219	25	0.02 781	9.86 295	12	50	
11	9.88 527	18	9.97 244	25	0.02 756	9.86 283	12	49	
12	9.88 540	14	9.97 269	26	0.02 731	9.86 271	12	48	
13	9.88 554	18	9.97 295	25	0.02 705	9.86 259	12	47	
14	9.88 567	14	9.97 320	25	0.02 680	9.86 247	12	46	
15	9.88 581	18	9.97 345	26	0.02 655	9.86 235	12	45	
16	9.88 594	14	9.97 371	25	0.02 629	9.86 223	12	44	
17	9.88 608	18	9.97 396	25	0.02 604	9.86 211	11	43	
18	9.88 621	18	9.97 421	26	0.02 579	9.86 200	12	42	
19	9.88 634	14	9.97 447	25	0.02 553	9.86 188	12	41	
20	9.88 648	18	9.97 472	25	0.02 528	9.86 176	12	40	
21	9.88 661	18	9.97 497	26	0.02 503	9.86 164	12	39	
22	9.88 674	14	9.97 523	25	0.02 477	9.86 152	12	38	
23	9.88 688	18	9.97 548	25	0.02 452	9.86 140	12	37	
24	9.88 701	14	9.97 573	25	0.02 427	9.86 128	12	36	
25	9.88 715	18	9.97 598	26	0.02 402	9.86 116	12	35	
26	9.88 728	18	9.97 624	25	0.02 376	9.86 104	12	34	
27	9.88 741	14	9.97 649	25	0.02 351	9.86 092	12	33	
28	9.88 755	18	9.97 674	26	0.02 326	9.86 080	12	32	
29	9.88 768	18	9.97 700	25	0.02 300	9.86 068	12	31	
30	9.88 781	14	9.97 725	25	0.02 275	9.86 056	12	30	
31	9.88 795	18	9.97 750	26	0.02 250	9.86 044	12	29	
32	9.88 808	18	9.97 776	25	0.02 224	9.86 032	12	28	
33	9.88 821	18	9.97 801	25	0.02 199	9.86 020	12	27	
34	9.88 834	14	9.97 826	25	0.02 174	9.86 008	12	26	
35	9.88 848	18	9.97 851	26	0.02 149	9.85 996	12	25	
36	9.88 861	18	9.97 877	25	0.02 123	9.85 984	12	24	
37	9.88 874	18	9.97 902	25	0.02 098	9.85 972	12	23	
38	9.88 887	14	9.97 927	26	0.02 073	9.85 960	12	22	
39	9.88 901	18	9.97 953	25	0.02 047	9.85 948	12	21	
40	9.88 914	18	9.97 978	25	0.02 022	9.85 936	12	20	
41	9.88 927	18	9.98 003	26	0.01 997	9.85 924	12	19	
42	9.88 940	14	9.98 029	25	0.01 971	9.85 912	12	18	
43	9.88 954	18	9.98 054	25	0.01 946	9.85 900	12	17	
44	9.88 967	18	9.98 079	25	0.01 921	9.85 888	12	16	
45	9.88 980	18	9.98 104	26	0.01 896	9.85 876	12	15	
46	9.88 993	18	9.98 130	25	0.01 870	9.85 864	12	14	
47	9.84 006	14	9.98 155	25	0.01 845	9.85 851	12	13	
48	9.84 020	18	9.98 180	26	0.01 820	9.85 839	12	12	
49	9.84 033	18	9.98 206	25	0.01 794	9.85 827	12	11	
50	9.84 046	18	9.98 231	25	0.01 769	9.85 815	12	10	
51	9.84 059	18	9.98 256	25	0.01 744	9.85 803	12	9	
52	9.84 072	18	9.98 281	26	0.01 719	9.85 791	12	8	
53	9.84 085	18	9.98 307	25	0.01 693	9.85 779	12	7	
54	9.84 098	14	9.98 332	25	0.01 668	9.85 766	12	6	
55	9.84 112	18	9.98 357	26	0.01 643	9.85 754	12	5	
56	9.84 125	18	9.98 382	25	0.01 617	9.85 742	12	4	
57	9.84 138	18	9.98 408	25	0.01 592	9.85 730	12	3	
58	9.84 151	18	9.98 433	25	0.01 567	9.85 718	12	2	
59	9.84 164	18	9.98 458	26	0.01 542	9.85 706	12	1	
60	9.84 177		9.98 484		0.01 516	9.85 693		0	
	L. Cos.	d.	L. Cotg.	c.d.	L. Tang.	L. Sin.	d.		P. P.

	L. Sin.	d.	L. Tang.	c.d.	L. Cotg.	L. Cos.	d.		P. P.
0	9.84 177	18	9.98 484	25	0.01 516	9.85 698	12	60	
1	9.84 190	18	9.98 509	25	0.01 491	9.85 681	12	59	
2	9.84 208	18	9.98 534	26	0.01 466	9.85 669	12	55	
3	9.84 216	18	9.98 560	25	0.01 440	9.85 657	12	57	
4	9.84 229	18	9.98 585	25	0.01 415	9.85 645	12	56	
5	9.84 242	18	9.98 610	25	0.01 390	9.85 632	12	55	
6	9.84 255	14	9.98 635	26	0.01 365	9.85 620	12	54	
7	9.84 269	18	9.98 661	25	0.01 339	9.85 608	12	53	
8	9.84 282	18	9.98 686	25	0.01 314	9.85 596	12	52	
9	9.84 295	18	9.98 711	26	0.01 289	9.85 583	12	51	
10	9.84 308	18	9.98 737	25	0.01 268	9.85 571	12	50	
11	9.84 321	18	9.98 762	25	0.01 239	9.85 559	12	49	
12	9.84 334	18	9.98 787	25	0.01 218	9.85 547	12	48	
13	9.84 347	18	9.98 812	26	0.01 193	9.85 534	12	47	
14	9.84 360	18	9.98 838	25	0.01 162	9.85 522	12	46	
15	9.84 373	12	9.98 863	25	0.01 137	9.85 510	12	45	
16	9.84 385	18	9.98 888	25	0.01 112	9.85 497	12	44	
17	9.84 398	18	9.98 913	26	0.01 087	9.85 485	12	43	
18	9.84 411	18	9.98 939	25	0.01 061	9.85 473	12	42	
19	9.84 424	18	9.98 964	25	0.01 036	9.85 460	12	41	
20	9.84 437	18	9.98 989	26	0.01 011	9.85 448	12	40	
21	9.84 450	18	9.99 015	25	0.00 985	9.85 436	12	39	
22	9.84 463	18	9.99 040	25	0.00 960	9.85 423	12	38	
23	9.84 476	18	9.99 065	25	0.00 935	9.85 411	12	37	
24	9.84 489	18	9.99 090	26	0.00 910	9.85 399	12	36	
25	9.84 502	18	9.99 116	25	0.00 884	9.85 386	12	35	
26	9.84 515	18	9.99 141	25	0.00 859	9.85 374	12	34	
27	9.84 528	12	9.99 166	25	0.00 834	9.85 361	12	33	
28	9.84 540	18	9.99 191	26	0.00 809	9.85 349	12	32	
29	9.84 553	18	9.99 217	25	0.00 788	9.85 337	12	31	
30	9.84 566	18	9.99 242	25	0.00 758	9.85 324	12	30	
31	9.84 579	18	9.99 267	26	0.00 733	9.85 312	12	29	
32	9.84 592	18	9.99 293	25	0.00 707	9.85 299	12	28	
33	9.84 605	18	9.99 318	25	0.00 682	9.85 287	12	27	
34	9.84 618	12	9.99 343	25	0.00 657	9.85 274	12	26	
35	9.84 630	18	9.99 368	26	0.00 632	9.85 262	12	25	
36	9.84 643	18	9.99 394	25	0.00 606	9.85 250	12	24	
37	9.84 656	18	9.99 419	25	0.00 581	9.85 237	12	23	
38	9.84 669	18	9.99 444	25	0.00 556	9.85 225	12	22	
39	9.84 682	12	9.99 469	26	0.00 531	9.85 212	12	21	
40	9.84 694	18	9.99 495	25	0.00 505	9.85 200	12	20	
41	9.84 707	18	9.99 520	25	0.00 480	9.85 187	12	19	
42	9.84 720	18	9.99 545	25	0.00 455	9.85 175	12	18	
43	9.84 733	12	9.99 570	26	0.00 430	9.85 162	12	17	
44	9.84 745	18	9.99 596	25	0.00 404	9.85 150	12	16	
45	9.84 758	18	9.99 621	25	0.00 379	9.85 137	12	15	
46	9.84 771	18	9.99 646	26	0.00 354	9.85 125	12	14	
47	9.84 784	12	9.99 672	25	0.00 329	9.85 112	12	13	
48	9.84 796	18	9.99 697	25	0.00 303	9.85 100	12	12	
49	9.84 809	18	9.99 722	25	0.00 278	9.85 087	12	11	
50	9.84 822	18	9.99 747	26	0.00 253	9.85 074	12	10	
51	9.84 835	12	9.99 773	25	0.00 227	9.85 062	12	9	
52	9.84 847	18	9.99 798	25	0.00 202	9.85 049	12	8	
53	9.84 860	18	9.99 823	25	0.00 177	9.85 037	12	7	
54	9.84 873	12	9.99 848	26	0.00 152	9.85 024	12	6	
55	9.84 885	18	9.99 874	25	0.00 126	9.85 012	12	5	
56	9.84 898	18	9.99 899	25	0.00 101	9.84 999	12	4	
57	9.84 911	18	9.99 924	25	0.00 076	9.84 986	12	3	
58	9.84 923	18	9.99 949	26	0.00 051	9.84 974	12	2	
59	9.84 936	18	9.99 975	25	0.00 025	9.84 961	12	1	
60	9.84 949		0.00 000		0.00 000	9.84 949		0	
	L. Cos.	d.	L. Cotg.	c.d.	L. Tang.	L. Sin.	d.		P. P.

**TABLE III.**

**THE NATURAL TRIGONOMETRIC FUNCTIONS.**

**For every ten minutes.**

°	0'	10'	20'	30'	40'	50'	60'		d.	P. P.
0	0.0000	0029	0058	0087	0116	0145	0175	89	29	
1	0175	0204	0233	0262	0291	0320	0349	88	29	<b>30 29</b>
2	0349	0378	0407	0436	0465	0494	0523	87	29	1 3.0 2.9
3	0523	0552	0581	0610	0640	0669	0698	86	29	2 6.0 5.8
4	0698	0727	0756	0785	0814	0843	0872	85	29	3 9.0 8.7
5	0.0872	0901	0929	0958	0987	1016	1045	84	29	4 12.0 11.6
6	1045	1074	1103	1132	1161	1190	1219	83	29	5 15.0 14.5
7	1219	1248	1276	1305	1334	1363	1392	82	29	6 18.0 17.4
8	1392	1421	1449	1478	1507	1536	1564	81	29	7 21.0 20.3
9	1564	1593	1622	1650	1679	1708	1736	80	29	8 24.0 23.2
10	0.1736	1765	1794	1822	1851	1880	1908	79	29	9 27.0 26.1
11	1908	1937	1965	1994	2022	2051	2079	78	28	<b>28 27</b>
12	2079	2108	2136	2164	2193	2221	2250	77	28	1 2.8 2.7
13	2250	2278	2306	2334	2363	2391	2419	76	28	2 5.6 5.4
14	2419	2447	2476	2504	2532	2560	2588	75	28	3 8.4 8.1
15	0.2588	2616	2644	2672	2700	2728	2756	74	28	4 11.2 10.8
16	2756	2784	2812	2840	2868	2896	2924	73	28	5 14.0 13.5
17	2924	2952	2979	3007	3035	3063	3090	72	28	6 16.8 16.2
18	3090	3118	3145	3173	3201	3228	3256	71	28	7 19.6 18.9
19	3256	3283	3311	3339	3367	3395	3423	70	27	8 22.4 21.6
20	0.3420	3448	3475	3503	3531	3558	3584	69	27	9 25.2 24.3
21	3584	3611	3638	3665	3692	3719	3746	68	27	<b>26 25</b>
22	3746	3773	3800	3827	3854	3881	3907	67	27	1 2.6 2.5
23	3907	3934	3961	3987	4014	4041	4067	66	27	2 5.2 5.0
24	4067	4094	4120	4147	4173	4200	4226	65	26	3 7.8 7.5
25	0.4226	4253	4279	4305	4331	4358	4384	64	26	4 10.4 10.0
26	4384	4410	4436	4462	4488	4514	4540	63	26	5 13.0 12.5
27	4540	4566	4592	4617	4643	4669	4695	62	26	6 15.6 15.0
28	4695	4720	4746	4772	4797	4823	4848	61	26	7 18.2 17.5
29	4848	4874	4899	4924	4950	4975	5000	60	25	8 20.8 20.0
30	0.5000	5025	5050	5075	5100	5125	5150	59	25	9 23.4 22.5
31	5150	5175	5200	5225	5250	5275	5299	58	25	<b>24 23</b>
32	5299	5324	5348	5373	5398	5423	5446	57	24	1 2.4 2.3
33	5446	5471	5495	5519	5544	5568	5592	56	24	2 4.8 4.6
34	5592	5616	5640	5664	5688	5712	5736	55	24	3 7.2 6.9
35	0.5736	5760	5789	5807	5831	5854	5878	54	24	4 9.6 9.2
36	5878	5901	5925	5948	5972	5995	6018	53	23	5 12.0 11.5
37	6018	6041	6065	6088	6111	6134	6157	52	23	6 14.4 13.8
38	6157	6180	6202	6225	6248	6271	6293	51	23	7 16.8 16.1
39	6293	6316	6338	6361	6383	6406	6428	50	22	8 19.2 18.4
40	0.6428	6450	6473	6494	6517	6539	6561	49	22	9 21.6 20.7
41	6561	6583	6604	6626	6648	6670	6691	48	22	<b>22 21 20</b>
42	6691	6713	6734	6756	6777	6799	6820	47	22	1 2.2 2.1
43	6820	6841	6863	6884	6905	6926	6947	46	21	2 4.4 4.2
44	6947	6967	6988	7009	7030	7050	7071	45	21	3 6.6 6.3
45	0.7071									4 8.8 8.4
										5 11.0 10.5
										6 13.2 12.6
										7 15.4 14.7
										8 17.6 16.8
										9 19.8 18.9
	60'	50'	40'	30'	20'	10'	0'	°	d.	P. P.

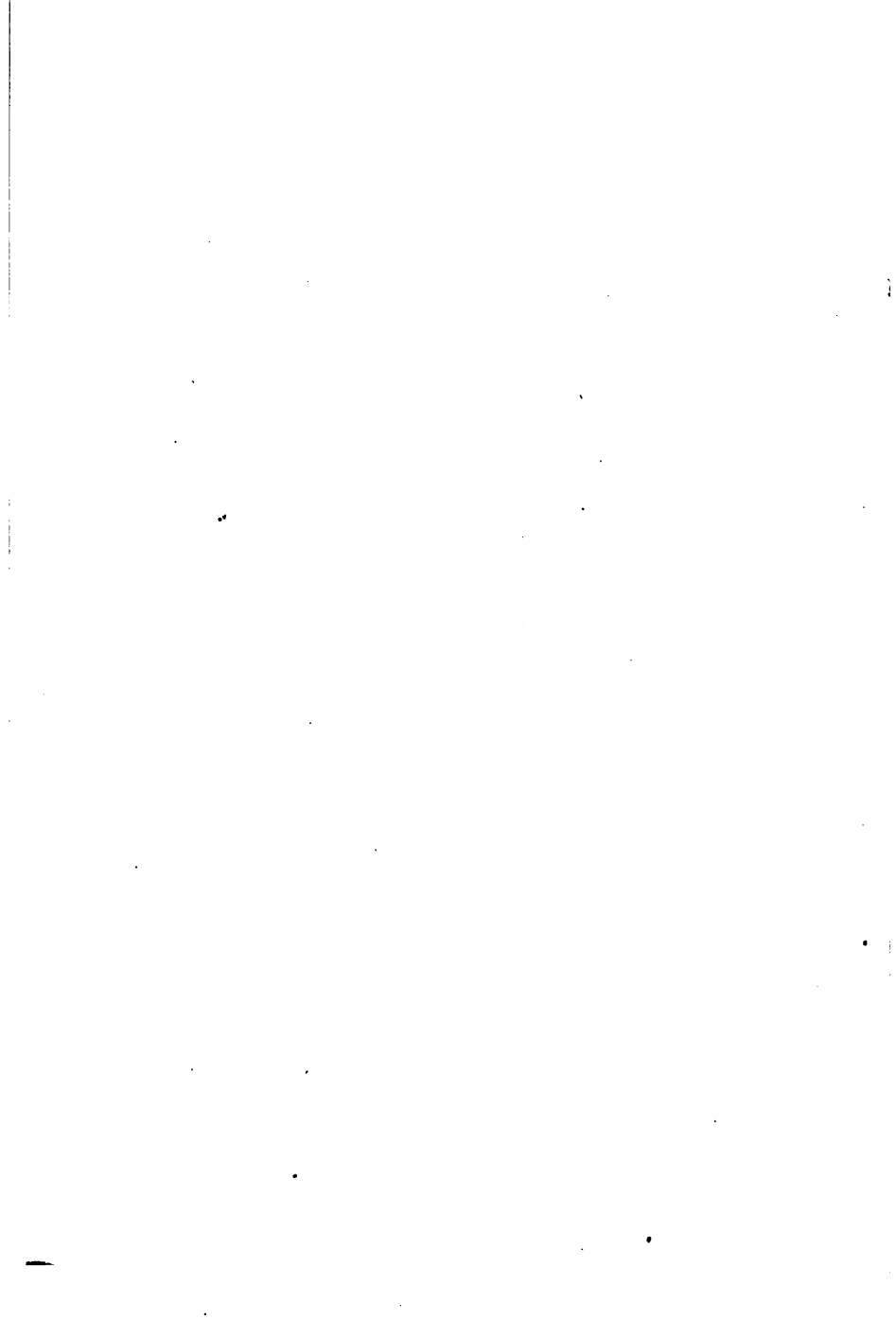


**Tangent.**

°	0'	10'	20'	30'	40'	50'	60'		d.	P. P.					
0	0, 0000	0029	0058	0087	0116	0145	0175	89	29						
1	0175	0204	0233	0262	0291	0320	0349	88	29	1	2, 9	3, 0	3, 1	3, 2	3, 3
2	0349	0378	0407	0437	0466	0495	0524	87	29	2	5, 8	6, 0	6, 2	6, 4	6, 6
3	0524	0553	0582	0612	0641	0670	0699	86	29	3	8, 7	9, 0	9, 3	9, 6	9, 9
4	0699	0729	0758	0787	0816	0846	0875	85	29	4	11, 6	12, 0	12, 4	12, 8	13, 2
										5	14, 5	15, 0	15, 5	16, 0	16, 5
										6	17, 4	18, 0	18, 6	19, 2	19, 8
										7	20, 3	21, 0	21, 7	22, 4	23, 1
										8	23, 2	24, 0	24, 8	25, 6	26, 4
										9	26, 1	27, 0	27, 9	28, 8	29, 7
5	0, 0875	0904	0934	0963	0992	1022	1051	84	29						
6	1051	1080	1110	1139	1169	1198	1228	83	80						
7	1228	1257	1287	1317	1346	1376	1405	82	80						
8	1405	1435	1465	1495	1524	1554	1584	81	80						
9	1584	1614	1644	1673	1703	1733	1763	80	80						
10	0, 1768	1798	1828	1858	1888	1914	1944	79	80						
11	1944	1974	2004	2035	2065	2095	2126	78	80						
12	2126	2156	2186	2217	2247	2278	2309	77	80						
13	2309	2339	2369	2401	2432	2462	2493	76	81						
14	2493	2524	2555	2586	2617	2648	2679	75	81						
15	0, 2679	2711	2742	2773	2805	2836	2867	74	81						
16	2867	2899	2931	2962	2994	3026	3057	73	82						
17	3057	3089	3121	3153	3185	3217	3249	72	82						
18	3249	3281	3314	3346	3378	3411	3443	71	82						
19	3443	3476	3508	3541	3574	3607	3640	70	83						
20	0, 3640	3673	3706	3739	3772	3805	3839	69	83						
21	3839	3872	3906	3939	3973	4006	4040	68	84						
22	4040	4074	4108	4142	4176	4210	4245	67	84						
23	4245	4279	4314	4348	4383	4417	4452	66	84						
24	4452	4487	4522	4557	4592	4626	4661	65	85						
25	0, 4663	4699	4734	4770	4806	4841	4877	64	86						
26	4877	4913	4950	4986	5022	5059	5095	63	86						
27	5095	5132	5169	5206	5243	5280	5317	62	87						
28	5317	5354	5392	5430	5467	5505	5543	61	88						
29	5543	5581	5619	5658	5696	5735	5774	60	88						
30	0, 5774	5812	5851	5890	5930	5969	6009	59	89						
31	6009	6048	6088	6128	6168	6208	6249	58	40						
32	6249	6289	6330	6371	6412	6453	6494	57	41						
33	6494	6536	6577	6619	6661	6703	6745	56	42						
34	6745	6787	6830	6873	6916	6959	7002	55	43						
35	0, 7002	7046	7089	7133	7177	7221	7265	54	44						
36	7265	7310	7355	7400	7445	7490	7536	53	45						
37	7536	7581	7627	7673	7720	7766	7813	52	46						
38	7813	7860	7907	7954	8002	8050	8098	51	48						
39	8098	8146	8195	8243	8292	8342	8391	50	49						
40	0, 8391	8441	8491	8541	8591	8642	8693	49	50						
41	8693	8744	8796	8847	8899	8952	9004	48	52						
42	9004	9057	9110	9163	9217	9271	9325	47	54						
43	9325	9380	9435	9490	9545	9601	9657	46	55						
44	9657	9718	9770	9827	9884	9942	10000	45	57						
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